

**LEEN-KIAT SOH**

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**EDUCATION**

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**Doctor of Philosophy** with HONORS, Electrical Engineering (Advisor: Costas Tsatsoulis)  
(with emphasis in Artificial Intelligence and Image Processing)  
University of Kansas, Lawrence, KS MAY 1998

**Master of Science**, Electrical Engineering (Advisor: Costas Tsatsoulis)  
University of Kansas, Lawrence, KS MAY 1993

**Bachelor of Science** with HIGHEST DISTINCTION, Electrical Engineering  
University of Kansas, Lawrence, KS MAY 1991

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**APPOINTMENTS**

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**Faculty Affiliate** MAY 2017 – present  
Center for Brain, Biology and Behavior (CB3)  
University of Nebraska, Lincoln, NE

**Dean's Fellow of the CAS Teaching Academy** MAY 2016 – present  
College of Arts and Sciences  
University of Nebraska, Lincoln, NE

**Full Professor**  
Department of Computer Science and Engineering  
University of Nebraska, Lincoln, NE AUG 2016 – present

**Faculty Fellow**  
Nebraska University Public Policy Center DEC 2013 – present

**Courtesy Associate Professor**  
Survey Research and Methodology  
University of Nebraska, Lincoln, NE AUG 2012 – present

**Associate Professor**  
Department of Computer Science and Engineering  
University of Nebraska, Lincoln, NE AUG 2007 – JUL 2016

**Gallup Research Professor**  
University of Nebraska, Lincoln, NE JAN 2005 – JUN 2005

**Director**  
National Center for Information Technology in Education  
University of Nebraska, Lincoln, NE AUG 2005 – AUG 2006

**Harold and Esther Edgerton Assistant Professor**  
University of Nebraska, Lincoln, NE AUG 2003 – JUL 2005

**Assistant Professor**  
Department of Computer Science and Engineering  
University of Nebraska, Lincoln, NE AUG 2001 – JUL 2006

**Post-Doctoral Research Associate**  
Information Technology and Telecommunications Center

University of Kansas, Lawrence, KS

AUG 2000 – JUL 2001

**Post-Doctoral Research Assistant**

Information Technology and Telecommunications Center

University of Kansas, Lawrence, KS

AUG 1998 – JUL 2000

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**HONORS AND AWARDS**

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- 1 **Distinguished Program Committee Member**, IJCAI'2019, out of 2964 program committee members
- 2 **NSF Research Showcase, SIGCSE'2019**, Minneapolis, MN
- 3 **Honoree, 2018 College of Engineering Research Celebration**, University of Nebraska
- 4 **Honorable Mention, 2018 NCWIT Engagement Excellence Awards**, for “Computational Creativity Exercise (CCE): Storytelling”, shared with co-creators Elizabeth Ingraham and Lee Dee Miller.
- 5 One of 26 **Exemplary Papers at SIGCSE'2017**, Seattle, WA
- 6 **College of Arts & Sciences Teaching Academy Fellow, August 2017 – August 2020**, University of Nebraska
- 7 **NSF Research Showcase, SIGCSE'2016**, Memphis, TN
- 8 **College of Arts & Sciences International Travel for Scholarly Presentations Award (\$1,500)** (2016), University of Nebraska
- 9 **College of Arts & Sciences International Travel for Scholarly Presentations Award (\$1,500)** (2015), University of Nebraska
- 10 **UNL Parents Association Certificate of Recognition for Contributions to Students**, 2014
- 11 **College of Engineering Distinguished Teaching Award** (2012), University of Nebraska
- 12 **Holling Family Master Teacher Award/UNL University-Wide Teaching Award** (2012), University of Nebraska
- 13 **CSE Department Recognition Award**, for the 2010-2011 Academic Year (2011), Department of Computer Science and Engineering, University of Nebraska
- 14 **University of Nebraska Student Impact Award Outstanding Advisor of the Year**, 2010-2011, University of Nebraska
- 15 **CSE Student Choice Outstanding Teaching Award (Lower Division Courses)** (2008), Department of Computer Science and Engineering, University of Nebraska
- 16 **Certificate of Recognition for Outstanding Contribution to Undergraduate Research** (2008), University of Nebraska
- 17 **Best Paper Award**, International Conference on Computers in Education (*ICCE'2005*)
- 18 **College of Arts and Sciences Distinguished Teaching Award** (2006), University of Nebraska
- 19 One of three finalists for UNL Student Organization New Advisor of the Year (2006), University of Nebraska
- 20 **CSE Chair Special Award** (2004), Department of Computer Science and Engineering, University of Nebraska
- 21 **CSE Student Choice Outstanding Teaching Award (Lower Division Courses)** (2004), Department of Computer Science and Engineering, University of Nebraska
- 22 **Harold and Esther Edgerton Junior Faculty Award** (2003-2005), University of Nebraska
- 23 Spring 1991 Electrical and Computer Engineering Award, University of Kansas.
- 24 Spring 1991 Electrical and Computer Engineering Student Marshal, University of Kansas.
- 25 Spring 1990 Undergraduate Research Award, College Honors Program, University of Kansas

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**GROUPS or LABORATORIES FOUNDED**

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- 1 Founder and Director, *Intelligent Agents and Multiagent Systems (IAMAS) Group*, University of Nebraska, Lincoln, NE, 2001 – present. (<http://cse.unl.edu/agents>)
- 2 Co-Founder and Co-Director, *Research and Innovation in Computing Education (RICE) Laboratory*, University of Nebraska, Lincoln, NE, 2016 – present. (with Steve Cooper) (<http://rice.unl.edu>)
- 3 Co-Founder and Co-Director, *Erudite Learning Laboratory* (previously Learning Technology Academy), University of Nebraska, Lincoln, NE (with Ron Nelson), 2016 – present.
- 4 Co-Founder and Secretary, *Computer Science Teachers Association (CSTA) Local Chapter Huskers* (1<sup>st</sup> chapter in the state of Nebraska), 2013 – present (<http://www.nebraskacsta.org/>)
- 5 Founding Member, *CodeLNK* (a diverse group led by Lincoln Chamber of Commerce, industry and academic representatives, founded to promote K-12 CS education), 2015 – 2019
- 6 Founding Member, *LPS Tech Tank* (a diverse group led by Jane Stavem, Associate Superintendent for Instruction at Lincoln Public Schools (LPS), with industry and academic representatives, founded to provide K-12 teacher professional development and training), 2015 – 2018

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### GRANTSMANSHIP

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- A. EXTERNAL (\$20,414,404 as PI/Co-PI; \$5,554,681 as PI; \$3,580,869 as Senior Personnel)**
- 1 **PI** (UNL) on National Geo-Spatial Intelligence Agency’s NURI Grant, “Leveraging Environment and Culture to Anticipate Social Unrest with Integrated Model- and Data-Driven Approaches,” 07/10/2019 – 07/09/2022, \$1,366,178 (UNL Share, Overall = \$1,603,645), HM04761912005 (Overall PI: Deepti Joshi, the Citadel College)
  - 2 **Senior Personnel** on NSF Scholarships in Science, Technology, Engineering and Mathematics (S-STEM), “Educating Undergraduate Students for STEM Career Opportunities in Nebraska: Networks, Experiential-Learning, & Computational Thinking,” 10/01/2019 – 09/30/2024, \$3,580,869, DUE-1930211 (PI: Jim Lewis)
  - 3 **PI** (UNL) on NSF IIS Robust Intelligence (RI), “RI: Small: Scalable Decentralized Planning in Open Multiagent Environments,” 08/01/2019 – 07/31/2022 (\$147,006 for UNL; \$498,391), IIS-1910156 (Overall PI: Adam Eck, Oberlin College)
  - 4 **Co-PI** on Library of Congress Preprocessing Pilot Project, “Digital Libraries, Intelligent Data Analytics, and Augmented Description: A Demonstration Project,” 07/01/2019 – 11/08/2019 (\$77,793), contract number: LCCIO19P0119 (PI: Elizabeth Lorang)
  - 5 **Co-PI** on NSF NRT-INFEWS, “Training in Theory and Application of Cross-Scale Resilience in Agriculturally Dominated Social Ecological Systems”, 07/24/2017-08/31/2022 (\$2,998,886), DGE-1735362 (PI: Craig Allen) (Soh joined the Co-PI team in January 2019)
  - 6 **PI** on NSF CSforAll Research Practitioners Partnership (RPP), “Adapt, Implement and Research at Nebraska: A Statewide Implementation Study of a Researcher-Practitioner Partnership for K-8 Computer Science Education”, 09/01/2018-08/31/2022 (\$2,000,000), DRL-1837476
  - 7 **Co-PI** on NSF Decision, Risk, and Management Sciences, “Collaborative Research: Measuring Attention, Working Memory, and Visual Perception to Reduce Risk of Injuries in the Construction Industry”, 07/01/2018 – 06/30/2021 (\$404,754; first year: \$152,471), contract number: SES-1824224 (Overall PI: Behzad Esmaili (George Mason University), PI: Mike Dodd, UNL)
  - 8 **Co-PI** on Google’s Computer Science Teachers Professional Development grant, “Computer Science in Rural Nebraska”, 07/01/2018 – 06/30/2019 (\$20,000), Tides Foundation (PI: Guy Trainin, UNL)
  - 9 **Co-PI** on NSF Robert Noyce Teacher Scholarship Program (Noyce), “NebraskaSTEM: Supporting Elementary Rural Teacher Leadership”, 03/01/2018 – 02/28/2023 (\$1,499,493), contract number: 1758496 (PI: Amanda Thomas, UNL)
  - 10 **Partner Investigator (UNL site/Subaward)** on Trans-Atlantic Platform’s Digging into Data Challenge grant, “Oceanic Exchanges: Tracing Global Information Networks in Historical Newspaper Repositories, 1840–1914”, 04/01/2017 – 03/31/2019 (\$56,375 local; about \$1,369,084 overall), (with Liz Lorang, UNL) (Program is funded by multiple agencies from different countries including NSF, NEH, and IMLS.)

- 11 **Co-PI** on NSF Decision, Risk, and Management Sciences, “Similarity as a Process Model of Intertemporal Choice”, 02/15/2017 – 01/31/2021 (\$655,376), contract number: SES-1658837 (PI: Jeffrey Stevens, UNL)
- 12 **Co-PI** on IMLS National Leadership Grants for Libraries award grant, “Extending Intelligent Computational Image Analysis for Archival Discovery”, 12/01/2016 – 11/30/2019 (\$462,317), contract number: LG-71-16-0152-16 (PI: Liz Lorang, UNL) (*Note*: IMLS = Institute of Museum and Library Services)
- 13 **Co-PI** on NSF Census Research Network (CRN) grant, “Medium Node: Reducing Error in Computerized Survey Data Collection” (Supplemental), 10/01/2016 – 12/31/2017 (\$517,178), contract number; NSF 1132015 (PI: Kristen Olson, UNL)
- 14 **PI (UNL site)** on NGA Academic Research Program (NARP) – NURI grant, “Anticipating Social Unrest Using Web-Based Spatio-Temporal Data-Driven Techniques,” 03/01/2016 – 03/01/2018, \$283,263 (UNL Portion: \$110,572), contract number HM04761610002 (PI: Deepti Joshi, The Citadel)
- 15 **Collaborator** on NSF SES REU grant, “A Quantitative Analysis of Heuristics and Discounting Models of Intertemporal Choice,” 06/16/2014 – 07/31/2014, \$6,000, contract number NSF SES 10-62045 (PI: Michel Regenwetter, UIUC, Co-PI: Jeffrey R. Stevens).
- 16 **PI** on NSF Improving Undergraduate STEM Education (IUSE) grant, “IUSE: Design, Development, and Implementation Projects: Computational Creativity to Improve CS Education for CS and non-CS Undergraduates,” 09/01/2014-08/31/2017, contract number DUE-1431874, \$873,250.
- 17 **Co-PI** on NEH Digital Humanities Start-up grant, “Image Analysis for Archival Discovery (Aida)”, 06/01/2014-05/31/2016, \$60,000 (PI: Elizabeth Lorang)
- 18 **Co-PI** on NSF SaTC grant, “SBES: Medium: Investigating the Role of Distrust in Unauthorized Online Activities Using an Integrated Sociotechnical Approach”, 09/01/2012-08/31/2014, \$490,758, contract number NSF SBES 1228937 (PI: Lisa Pytlik Zillig)
- 19 **Co-PI** on NSF CRN grant, “Reducing Error in Computer Survey Data Collection”, 10/01/2011-09/30/2016, \$2,967,347, contract number NSF SES-1132015 (PI: Allan McCutcheon)
- 20 **PI** on NSF TUES grant, “Integrating Computational and Creative Thinking (IC2Think)”, 08/01/2011-07/31/2013, \$250,000, contract number NSF DUE-1122956.
- 21 **Advisory Board** on an NEH grant “Civil War Washington”, 07/2010-06/2011, (PI Julie Poykko-Post, Co-PI Kenneth Price).
- 22 **PI** on NSF CPATH CDP grant, “Renaissance Computing,” 08/01/2008-07/31/2010, \$149,970, contract number CNS-0829647.
- a. Also received an REU grant, 06/17/2009-08/31/2010, \$16,000, CNS-0934062
  - b. Also received an RET grant, 06/01/2009-05/31/2010, \$25,000, CNS-0937486
  - c. Also received an RET grant, 06/01/2010-05/31/2011, \$27,000, CNS-1036088
- 23 **Co-PI** on NSF BDI grant, “An Extensible Semantic Bridge between Biodiversity and Genomics”, 08/01/2008-07/31/2011, \$1,367,121, contract number DBI-0743783 (PI: Scott)
- a. Also received an REU grant, 06/01/2009, \$8,000
  - b. Also received a Workshop grant, NSF BDI-0938224 (PI: Scott), 09/01/2009, \$26,564
- 24 **PI** on National Center for Women and IT (NCWIT) grant, “Girl Empowerment and Mentoring (GEM) for Computing”, 01/01/2008-12/31/2008, \$15,000.
- 25 **PI** on NSF ALT grant, “Embedding and Validating Empirical Usage Intelligence in Learning Objects”, 09/15/2007-07/31/2009, \$397,705, contract number IIS-0632642.
- a. Also received an REU grant, 06/17/2008-08/31/2009, \$12,000
- 26 **Co-PI** on NSF IIS grant, “Building Knowledge Discovery and Information Fusion Tools for Collaborative Systems to Adaptively Manage Uncertain Hydrological Resources”, 08/01/2006-07/31/2009, \$552,710, contract number IIS-0618661 (PI: Samal)
- a. Also received a Partnership grant to establish collaborations in China (PI: Samal): 08/01/2007-07/31/2008, \$49,716

- b. Also received a DHHS-Center for Disease supplement (**PI**: Ashok Samal): 06/09/2008-07/31/2011, \$50,000
- 27 **PI** on Microsoft Research Conference XP Wireless Grant, “CXP+I-MINDS: Deployment and Evaluation over Wireless Networks”, \$88,460, 04/01/2006-04/01/2007, unrestricted gift.
- 28 **PI** on Microsoft Research Conference XP grant, “Supporting and Enhancing Cooperative Learning with Conference XP-powered I-MINDS”, \$50,000, 04/01/2005-04/01/2006, unrestricted gift.
- 29 **PI** (initially Co-Principal Investigator) on NSF SGER grant, “Affinity Learning Authoring Tools,” for \$98,427, 04/01/2005-04/01/2006, contract number ESI-0513405. (Original PI: Zygielbaum)
- 30 **Co-I** on NSF SBIR grant, “I-MINDS: Intelligent Multiagent Infrastructure for Distributed Systems in Education,” for \$99,611, 01/01/2005-06/31/2005, contract number DMI-0441249. (PI: Jiang)
- 31 **Co-PI** on NSF ITR grant, “Intelligent Joint Evolution of Data and Information: An Integrated Framework for Drought Monitoring and Mitigation Support,” for \$199,995, period of performance 01/01/2003 – 12/31/2004, contract number ITRF#IIS00219970. (PI: Samal)
- a. Also received an NSF REU grant, \$8,000, 07/15/2003-12/31/2003, \$8,000
- 32 **PI** on a subcontract grant “Negotiation-Based Coalition Formation for Multiagent Target Tracking” from the DARPA ANTS project, subcontracted from the University of Kansas, for \$55,000, period of performance 8/16/01-10/15/2002, contract number 26-0511-0026-001.
- 33 **Co-I** on a grant "Generating a Rule-Base for Sea-Ice Classification" from the Naval Research Laboratory, for \$95,000, period of performance 8/16/1998-8/15/2000, NRL contract number N00014-95-C-6038. (PI: Tsatsoulis)
- B. INTERNAL (Overall: \$472,431; PI: \$109,871)**
- 1 **Co-PI**, University of Nebraska Food for Health Team Strengthening Grant, “Developing a MOOCocracy Prototype to Increase Public Understanding of Food Insecurity”, \$149,693, 07/01/2017-06/30/2019 (PI: Jamie Loizzo)
- 2 **Co-PI**, University of Nebraska Food for Health Collaboration Initiative Planning Grant, “Using and Enhancing MOOCs to Facilitate Effective Democratic Discussions and Public Consensus around Food for Health Issues and Policies”, \$19,967, 03/01/2016-02/28/2017 (PI: Lisa Pytlik Zillig)
- 3 **Co-PI**, UNL Kelly Fund, “History Harvest”, \$10,000, 05/01/2013-04/30/2014 (PI: Thomas)
- 4 **PI**, UNL Phase II Pathways to Interdisciplinary Research Centers, “Center for Computational Creativity”, \$75,000, 07/01/2012-06/30/2013.
- 5 **PI**, UNL Kelly Fund, “Investigating Interdisciplinary and Team-Based Learning in Computer Science and Humanities”, \$22,000, 06/31/2009-07/01/2011. (DECLINED)
- 6 **Co-PI**, UNL ITLE Grant, “Improving Writing in the History Survey Courses”, \$18,000, 01/01/2008 (PI: Thomas)
- 7 **Co-PI**, Layman Grant, “SCID: A Semantic Cyberinfrastructure to Support Investigation and Discovery in Science, Engineering and the Humanities”, \$10,000, period of performance 01/07-06/07 (PI: Scott)
- 8 **Co-PI** on a Channing B. and Katherine W. Baker Fund #3524 Grant, “Delineation of Differentiated Management Areas within an Agricultural Field”, University of Nebraska, \$36,000, period of performance 08/06-07/09. (PI: Adamchuk)
- 9 **Co-I** on a Cyberinfrastructure Research Development Grant, “Federating Distributed Databases: Integrating Biodiversity and Bioinformatics”, University of Nebraska, \$20,000, period of performance 05/06-05/07. (PI: Scott)
- 10 **PI**, Gallup Research Professorship, “Towards an Intelligent Self-Administered Survey Agent (ISASA): Supporting, Customizing, and Learning about Online Surveys,” \$20,000, period of performance, 01/01/05-06/30/05.
- 11 **Co-PI** on a Nebraska Research Cluster grant, “The High Plains Observatory for Integrated Phenology: Predicting The Behavior and Life Cycles of Introduced and Native Plants, Insects, and Plant Diseases on the Landscape,” \$32,000, period of performance, 07/01/04-06/30/06. (PI: Baenzinger)

- 12 **PI** on an Enhancing Teaching and Learning at UNL Seed Grant Program “Delivering and Improving Learning Objects with Agent Intelligence,” University of Nebraska, \$5,000, period of performance 05/04-05/05.
- 13 **Co-PI** on a grant “Technology Enhanced Reading Instruction”, \$25,000, Research Cluster, University of Nebraska, period of performance, 07/01/03-06/30/04. (PI: Brooks)
- 14 **PI** on a Layman Fund Awards “Imagery Collaborative, Hierarchical Ontology for Indexing and Retrieval (I-CHOIR),” \$9,871, University of Nebraska, period of performance 07/01/03-06/30/04.
- 15 **Co-PI** on a grant “On-Line System for Judging Programming Competitions”, Math and Science Education Area of Strength of College of Liberal Arts and Sciences, University of Nebraska, \$5,000, period of performance 06/01/02-08/31/02. (Co-PI: Cusack)
- 16 **Co-PI** on a grant “I-MINDS: Intelligent Multiagent Infrastructure for Distributed Systems in Education,” National Center for Information Technology in Education (NCITE) Seed Grant Program, \$36,900, period of performance 07/01/02-08/31/03. (Co-PI: Jiang, Swanson, Harnisch)

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## RESEARCH

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### A. INTEREST AREAS

#### ***Multiagent Systems, Modeling and Simulation***

Coalition/team formation, ad hoc team formation, learning, planning, negotiations, active sensing, information sharing, reflective reasoning

#### ***Computer Science Education***

CS1/2, integrating creative thinking, computer-assisted instruction, intelligent education tools, instructional technology, curriculum

#### ***Computer-Aided Education***

Computer-Supported Collaborative Learning (CSCL), Intelligent Tutoring Systems (ITS), learning objects, intelligent user interfaces, user modeling

#### ***Applied and Interdisciplinary Research Areas***

Geoinformatics, Survey Informatics, Smart Grids, Cognitive Computing, Poem Detection

#### ***[prior to 2002] Image Processing and Computer Vision***

Image segmentation, image enhancement, image classification, image representation, feature extraction, edge description and detection, texture discrimination, remote sensing

### B. PUBLICATIONS

***Underlined authors are student authors. \* indicates graduate students advised by other faculty. † indicates mentored undergraduate students. ^ indicates post-doctoral students mentored. Percentage indicates estimated author contribution.***

#### ***Theses***

- Th1 Soh, L.-K. (1993). *A Multistage Feature Extraction Technique for Synthetic Aperture Radar (SAR) Sea Ice Imagery*, M.S. E.E. Thesis, Electrical and Computer Engineering Department, University of Kansas, Lawrence, KS.
- Th2 Soh, L.-K. (1998). *Automated Image Segmentation: A Data Investigation Model and SAR Sea Ice Applications*, Ph.D. E.E. Dissertation, Electrical Engineering and Computer Science Department, University of Kansas, Lawrence, KS.

#### ***Edited Proceedings and Books***

- E1 Moriyama, E., L.-K. Soh, and S. Scott (2009). *Proceedings of the 6<sup>th</sup> Annual Biotechnology and Bioinformatics Symposium (BIOT-2009)*, October 9-10, University of Nebraska, Lincoln, NE. (33%)
- E2 Moriyama, E., S. Scott, and L.-K. Soh (2010). Guest Editors, *International Journal of Bioinformatics Research and Application*, Vol. 6, No. 4, Special Issue on BIOT-2009. (33%)

#### ***Book Chapters***

- BC1 Soh, L.-K. and A. Samal (2008). Computing Fitness of Use of Geospatial Datasets, in S. Shekhar and H. Xiong (eds.) (2008) *Encyclopedia of Geographic Information Systems*, Springer. (50%)
- BC2 Soh, L.-K. and H. Jiang (2005). Intelligent Multiagent Cooperative Learning System, in C. Ghaoui (ed.) (2005) *Encyclopedia of Human Computer Interaction*, 18-23, London, UK: Idea Group Reference. (85%)
- BC3 Soh, L.-K. (2005). Agent-Supported Interface for Online Tutoring, in C. Ghaoui (ed.) (2005) *Encyclopedia of Human Computer Interaction*, 348-354, London, UK: Idea Group Reference.
- BC4 Soh, L.-K., T. Blank, and L.D. Miller (2005). Intelligent Agents that Learn to Deliver Online Materials to Students Better: Agent Design, Simulation and Assumptions, in C. Chaoui, M. Jain, V. Bannore, and L. C. Jain (eds.) *Studies in Fuzziness and Soft Computing: Knowledge-Based Virtual Education*, Chapter 3, Volume 178, May 2005, pp. 49-80. (45%)
- BC5 Zhang, Z., L.-K. Soh, H. Jiang, and X. Liu (2005). Using Multiagent Intelligence to Support Synchronous and Asynchronous Learning, in C. Chaoui, M. Jain, V. Bannore, and L. C. Jain (eds.) *Studies in Fuzziness and Soft Computing: Knowledge-Based Virtual Education*, Chapter 5, Volume 178, May 2005, pp. 111-140. (35%)
- BC6 Samal, A., G. Nugent, L.-K. Soh, J. Lang\*, and S. Person (2005). Reinventing Computer Science Curriculum at University of Nebraska, in PytlíkZillig, M. Bodvarsson, and R. Bruning (Eds.) *Technology-Based Education: Bringing Researchers and Practitioners Together*, Chapter 4, pp. 63-82, Information Age Publishing. (25%)
- BC7 Soh, L.-K., X. Zhang, X. Liu, and H. Jiang (2005). Intelligent Collaborating Agents to Support Teaching and Learning, in PytlíkZillig, M. Bodvarsson, and R. Bruning (Eds.) *Technology-Based Education: Bringing Researchers and Practitioners Together*, Chapter 10, pp. 203-224, Information Age Publishing. (40%)
- BC8 Soh, L.-K. and J. Luo (2004). Cautious Cooperative Learning for Automated Reasoning in a Multiagent System, *Frontiers in Artificial Intelligence and Applications*, pp. 183-199, IOS Press. (Extended version of a workshop paper) (65%)
- BC9 Soh, L.-K., X. Liu, X. Zhang, J. Al-Jaroodi\*, H. Jiang, P. Vermuri (2004). I-MINDS: An Agent-Oriented Information System for Applications in Education, *Lecture Notes in Artificial Intelligence (LNAI 3030) Series Agent-Oriented Information Systems*, Springer-Verlag, pp.16-31. (Extended version of a workshop paper) (45%)
- BC10 Soh, L.-K., C. Tsatsoulis, and H. Sevay\* (2003). A Satisficing, Learning, and Negotiated Coalition Formation Architecture, in *Distributed Sensor Networks: A Multiagent Perspective*, V. Lesser, M. Tambe and C. Ortiz (eds.), Kluwer Publishing, Chapter 7, pp.109-138. (75%)
- BC11 Tsatsoulis, C. and L.-K. Soh (2000). Intelligent Agents in Telecommunication Networks, in *Computational Intelligence in Telecommunications Networks*, W. Pedrycz and A. V. Vasilakos (eds.), CRC Press, Chapter 19, pp. 480-504. (70%)
- BC12 Soh, L.-K., C. Tsatsoulis, and B. Holt (1998). Identifying Ice Floes and Computing Ice Floe Distributions in SAR Images, in *Recent Advances in the Analysis of SAR Sea Ice Data*, C. Tsatsoulis and R. Kwok (eds.), Berlin: Springer-Verlag, pp. 9-34. (85%)

### **Journal Publications**

- J1 Weinberg, D. H., J. M. Abowd, R. F. Belli, N. Cressie, D. C. Folch, S. H. Holan, M. C. Levenstein, K. M. Olson, J. P. Reiter, M. D. Shapiro, J. D. Smyth, L.-K. Soh, B. D. Spencer, S. E. Spielman, L. Vilhuber, and C. K. Wikle (2018). Effects of a Government-Academic Partnership: Has the NSF-Census Bureau Research Network Helped Improve the US Statistical System?, *Journal of Survey Statistics and Methodology*, 7:589-619. (5%)
- J2 Soh, L.-K., and S. Cooper (2018). Guest Editorial Special Issue on Computing in Engineering, *IEEE Transactions on Education*, 61(3):165-166. (90%)
- J3 Peteranetz\*, M. S., A. E. Flanigan\*, D. F. Shell, and L.-K. Soh (2018). Helping Engineering Students Learn in Introductory Computer Science (CS1) Using Computational Creativity Exercises (CCEs), *IEEE Transactions on Education*, 61(3):195-203. *Special Issue on Computing in Engineering*. (20%)

- J4 Foruzan\*, E., L.-K. Soh, and S. Asgarpour (2018). Reinforcement Learning Approach for Optimal Distributed Energy Management in a Microgrid, *IEEE Transactions on Power Systems*, **33**(5):5749-5758. (35%)
- J5 Peteranetz\*, M., A. Flanigan\*, D. F. Shell, and L.-K. Soh (2018). Career Aspirations, Perceived Instrumentality, and Achievement in Undergraduate Computer Science, *Contemporary Educational Psychology*, **53**:27-44 (10%)
- J6 Stevens, J. R., and L.-K. Soh (2018). Predicting Similarity Judgments in Intertemporal Choice with Machine Learning, *Psychonomic Bulletin & Review*, **25**:627-635. (15%)
- J7 Peteranetz\*, M., A. Flanigan\*, D. F. Shell, and L.-K. Soh (2017). Computational Creativity: An Avenue for Promoting Learning in Computer Science, *IEEE Transactions on Education*, **60**(4):305-313. (20%)
- J8 Flanigan\*, A., M. Peteranetz\*, D. F. Shell, and L.-K. Soh (2017). Implicit Intelligence Beliefs of Computer Science Students: Exploring Change across the Semester, *Contemporary Educational Psychology*, **48**:179-196. (*PlumX Metrics – Top Social Media Articles One of the top-10 2017 articles that have had the most social media attention in terms of: Captures, Mentions, Social Media and Citations.*) (10%)
- J9 Belli, R. F., L. D. Miller, T. Al Baghal, and L.-K. Soh (2016). Using Data Mining to Predict the Occurrence of Respondent Retrieval Strategies in Calendar Interviewing: The Quality of Retrospective Reports, *Journal of Official Statistics*, **32**(3):579-600. (10%).
- J10 Eck, A., L.-K. Soh, S. Devlin, and D. Kudenko (2016). Potential-Based Reward Shaping for Finite Horizon Online POMDP Planning, *Autonomous Agents and Multiagent Systems*, **30**(3):403-445. (25%)
- J11 Miller, L. D., L.-K. Soh, A. Samal, K. Kupchak, and G. Nugent (2015). A Comparison of Educational Statistics and Data Mining Approaches to Identify Characteristics that Impact Online Learning, *Journal of Educational Data Mining*, **7**(3):117-150. (35%)
- J12 Eck, A., L.-K. Soh, K. Olson, A. L. McCutcheon, J. Smyth, and R. F. Belli (2015). Understanding the Human Condition through Survey Informatics, *Computer*, **48**(11):110-114.
- J13 Shell, D., L.-K. Soh, and V. Chriacescu (2015). Modeling Self-Efficacy as a Dynamic Cognitive Process with the Computational-Unified Learning Model (C-ULM): Implications for Cognitive Informatics and Cognitive Computing, *International Journal of Cognitive Informatics and Natural Intelligence*, **9**(3):1-24. (33%). (Extended version of ICCI\*CC'2014 paper)
- J14 Soh, L.-K., D. F. Shell, E. Ingraham, S. Ramsay, and Brian Moore (2015). Viewpoint: Improving Learning and Achievement in Introductory Computer Science through Computational Creativity, *Communications of the ACM*, **58**(8):33-35. (40%).
- J15 PytlikZillig, L. M., S. Wang\*, L.-K. Soh, A. Tomkins, A. Samal, T. Benadt, and M. Hayes (2015). Exploring Reactions to Hacktivism among STEM College Students: A Preliminary Model of Hacktivism Support and Resistance, *Social Science Computer Review*, **33**(4):479-497. (15%)
- J16 Lorang, E., L.-K. Soh, M. Datla†, and S. Kulwicki† (2015). Developing an Image-Based Classifier for Detecting Poetic Content in Historic Newspaper Collections, *D-Lib Magazine*, **21**(7/8), DOI:10.1045/july2015-lorang (40%)
- J17 Miller, L. D. and L.-K. Soh (2015). Cluster-Based Boosting, *IEEE Transactions on Knowledge and Data Engineering*, **27**(6):1491-1504. (40%).
- J18 Muto-Nelson, K. G., D. F. Shell, J. Husman, E. Fishman, and L.-K. Soh (2015). Motivational and Self-Regulated Learning Profiles of Students Taking Foundational Engineering Course, *Journal of Engineering Education*, **104**(1):74-100. (10%) **Note: One of the three most cited articles in 2015-2016 from the journal (listed #1).**
- J19 Miller, L. D., L.-K. Soh, and S Scott (2015). Genetic Algorithm Classifier System for Semi-Supervised Learning, *Computational Intelligence*, **31**(2):201-232. (30%)
- J20 Kahrobaee\*, S., R. Rajabzadeh, L.-K. Soh, and S. Asgarpour (2014). Multiagent Study of Smart Grid Customers with Neighborhood Electricity Trading, *Electric Power Systems Research*, **111**:123-132. (25%)

- J21 Hong, T., K. Hart\*, A. Samal, and L.-K. Soh (2014). Using Spatial Data Support for Reducing Uncertainty in Geospatial Applications, *Geoinformatica*, **18**:63-92. (15%)
- J22 Joshi, D., L.-K. Soh, A. Samal, and J. Zhang (2014). A Dissimilarity Function for Geospatial Polygons, *Knowledge and Information Systems*, **41**(1):153-168. (25%)
- J23 Jumadinova\*, J., R. Dasgupta, and L.-K. Soh (2014). Strategic Capability-Learning for Improved Multi-Agent Collaboration in Ad-Hoc Environments, *IEEE Transactions on Systems, Man, and Cybernetics-Part A*, **44**(8):1003-1014. (30%)
- J24 Chiriacescu, V., L.-K. Soh, and D. F. Shell (2013). Understanding Human Learning Using a Multi-Agent Simulation of the Unified Learning Model, *International Journal of Cognitive Informatics and Cognitive Computing*, **7**(4):1-25, October-December 2013. (30%)
- J25 Eck, A. and L.-K. Soh (2013). MineralMiner: An Active Sensing Simulation Environment, *Multiagent and Grid Systems*, **9**:197-226. (10%)
- J26 Shell, D. and L.-K. Soh (2013). Profiles of Motivated Self-Regulation in College Computer Science Courses: Differences in Major versus Required Non-Major Courses, *Journal of Science Education and Technology*, **22**(6):899-913. (15%)
- J27 Kahrobaee\*, S., R. Rajabzadeh, L.-K. Soh, and S. Asgarpour (2013). A Multiagent Modeling and Investigation of Smart Homes with Power Generation, Storage, and Trading Features, *IEEE Transactions on Smart Grids*, **4**(2):659-668. (20%)
- J28 Joshi, D., A. Samal, and L.-K. Soh (2013). Spatio-Temporal Polygonal Clustering with Space and Time as First-Class Citizens, *Geoinformatica*, **17**(3):387-412. (15%)
- J29 Eck, A. and L.-K. Soh (2013) Observer Effect from Stateful Resources in Agent Sensing, *Journal of Autonomous Agents and Multiagent Systems*, **26**(2):202-244. (35%)
- J30 Joshi, D., L.-K. Soh, and A. Samal (2012). Redistricting Using Constrained Polygonal Clustering, *IEEE Transactions on Knowledge and Data Engineering*, **24**(11):2065-2079. (20%)
- J31 Miller, L. D., L.-K. Soh, G. Nugent, and A. Samal (2011). iLOG: A Framework for Automatic Annotation of Learning Objects with Empirical Usage Metadata, *International Journal of Artificial Intelligence in Education*, **21**:215-236. (20%)
- J32 Miller, L. D., N. Khandaker, D. F. Shell, and L.-K. Soh (2010/2011). Teaching Using Computer Games, *Journal of Educational Technology Systems*, **39**(3):321-343. (10%)
- J33 Khandaker, N. and Soh, L.-K. (2011). Improving Group Selection and Assessment in an Asynchronous Collaborative Learning Application, *International Journal of Artificial Intelligence in Education*, **20**(3):231-268. (25%)
- J34 Khandaker, N. and L.-K. Soh (2011). SimCoL: A Simulation Tool for Computer-Supported Collaborative Learning, *IEEE Transactions on Systems, Man, and Cybernetics: Part C: Applications and Reviews*, **41**(4):533-543. (25%)
- J35 Moriyama, E., S. Scott, and L.-K. Soh (2010). Editorial, *International Journal of Bioinformatics Research and Applications*, **6**(4):323-325. (10%)
- J36 Khandaker, N., L.-K. Soh, L. D. Miller, A. Eck, and H. Jiang (2011). Lessons Learned from Comprehensive Deployments of Multiagent CSCL Applications I-MINDS and ClassroomWiki, *IEEE Transactions on Learning Technologies*, **4**(1):47-58. (30%)
- J37 Khandaker, N. and L.-K. Soh (2010). ClassroomWiki: A Collaborative Wiki for Instructional Use with Multiagent Group Formation, *IEEE Transactions on Learning Technologies*, **3**(3):190-202. (20%)
- J38 Wu, H., L.-K. Soh, A. Samal, T. Hong, D. Marx, and X.-H. Chen (2009). Upstream-Downstream Relationships in terms of Annual Streamflow Discharges and Drought Events in Nebraska, *Journal of Water Resource and Protection*, **1**(5):299-315. (15%)
- J39 Spradling, C., L.-K. Soh, and C. J. Ansorge (2009). A Comprehensive Survey on the Status of Social and Professional Issues in United States Undergraduate Computer Science Programs and Recommendations, *Computer Science Education*, **19**(3):137-153. (15%)

- J40 Spradling, C., L.-K. Soh, and C. Ansorge (2008). Ethics Training and Decision-Making: Do Computer Science Programs Need Help? *ACM SIGCSE Bulletin*, **40**(1):153-157. (15%)
- J41 Soh, L.-K. and X. Li (2008). Investigating Adaptive, Confidence-Based Strategic Negotiations in Complex Multiagent Environments, *Web Intelligence and Agent Systems*, **6**(3):313-326. (65%)
- J42 Khandaker, N. and L.-K. Soh (2008). Forming and Scaffolding Human Coalitions: A Framework and An Implementation in Computer-Supported Collaborative Learning Environment, *International Transactions on Systems Science and Applications*, **4**(1):3-22. (25%)
- J43 Soh, L.-K., D. Fowler, and A. I. Zygielbaum (2007-2008). The Impact of the Affinity Learning Authoring Tool on Student Learning, *Journal of Educational Technology Systems*, **36**(1):29-62. (65%)
- J44 Soh, L.-K. (2008). Considering Operational Issues for Multiagent Ontological Inferencing in a Distributed Information Retrieval Application, *Web Intelligence and Agent Systems*, **6**(1):1-28.
- J45 Soh, L.-K., N. Khandaker, and H. Jiang (2008). I-MINDS: A Multiagent System for Intelligent Computer-Supported Cooperative Learning and Classroom Management, *International Journal of Artificial Intelligence in Education*, **18**(2):119-151. (60%)
- J46 Soh, L.-K. and T. Blank (2008). Integrating Case-Based Reasoning and Multistrategy Learning for a Self-Improving Intelligent Tutoring System, *International Journal of Artificial Intelligence in Education*, **18**(1):27-58. (65%)
- J47 Wu, H., L.-K. Soh, A. Samal, and X. Chen (2008). Trend Analysis of Streamflow Drought Events in Nebraska, *Water Resources Management*, **22**:145-164. (15%)
- J48 Fu, L., L.-K. Soh, and A. Samal (2008). Techniques for Computing Fitness of Use (FoU) for Time Series Datasets with Applications in the Geospatial Domain, *Geoinformatica*, **12**(1):91-115. (30%)
- J49 Soh, L.-K., A. Samal, and G. Nugent (2007). An Integrated Framework for Improved Computer Science Education: Strategies, Implementations, and Results, *Computer Science Education*, **17**(1):59-83. (75%)
- J50 Almstrum, V. L., P. B. Henderon, V. Harvey, C. Heeren, W. Marion, C. Riedesel, L.-K. Soh, and A. E. Tew (2006). Concept Inventories in Computer Science for the Topic Discrete Mathematics, *SIGCSE Bulletin*, **38**(4):132-145. ITiCSE'2006 Working Group reports. (10%)
- J51 Nugent, G., L.-K. Soh, and A. Samal (2006). Design, Development and Validation of Learning Objects, *Journal of Educational Technology Systems*, **34**(3):271-281. (30%)
- J52 Soh, L.-K., A. Samal, and J. Zhang (2006). A Task-Based Approach to User Interface Design for a Web-Based Hydrologic Information System, *Transactions on GIS*, **10**(3):417-449. (55%)
- J53 Nugent, G., L.-K. Soh, A. Samal, and J. Lang\* (2006). A Placement Test for Computer Science: Design, Implementation, and Analysis, *Computer Science Education*, **16**(1):19-36. (25%)
- J54 Lang\*, J., G. Nugent, A. Samal, and L.-K. Soh (2006). Implementing CS1 with Embedded Instructional Research Design in Laboratories, *IEEE Transactions on Education*, **49**(1):157-165. (10%)
- J55 Soh, L.-K., G. Nugent, and A. Samal (2005). A Framework for CS1 Closed Laboratories, *Journal of Educational Resources in Computing*, **5**(4):1-13. (65%)
- J56 Li, X. and L.-K. Soh (2005) Hybrid Negotiation for Resource Coordination in Multiagent Systems, *Web Intelligence and Agent Systems*, **3**(4):231-259. (35%)
- J57 Soh, L.-K. and C. Tsatsoulis (2005). A Real-Time Negotiation Model and A Multi-Agent Sensor Network Implementation, *Journal of Autonomous Agents and Multi-Agent Systems*, **11**:215-271. (85%)
- J58 Soh, L.-K., C. Tsatsoulis, D. Gineris, and C. Bertoia (2004). ARKTOS: An Intelligent System for Satellite Sea Ice Images, *IEEE Transactions on Geoscience and Remote Sensing*, **42**(1):229-248. (Paper referenced by The Bibliography on Cold Regions Science and Technology, currently compiled by the American Geological Institute, at [http://www.coldregions.org/cralert.htm#C\\_C\\_N390](http://www.coldregions.org/cralert.htm#C_C_N390)) (90%)
- J59 Soh, L.-K. (2003). A Multiresolution, Dynamic and Adaptive Image Quantization Methodology: Automation and Analysis, *Journal of Electronic Imaging*, **12**(2):229-243.

- J60 Soh, L.-K. and C. Tsatsoulis (2002). ARKTOS: A Knowledge Engineering Software Tool for Images, *International Journal of Human-Computer Studies*, 57(6):469-496. (95%)
- J61 Soh, L.-K. and C. Tsatsoulis (2000). Separating Touching Objects in Remote Sensing Imagery: The Restricted Growing Concept and Implementations, *IEEE Transactions on Image Processing*, Vol. 9, No. 2, pp. 312-315. (90%)
- J62 Soh, L.-K. and C. Tsatsoulis (1999). Unsupervised Segmentation of ERS and RADARSAT Sea Ice Images Using Multiresolution Peak Detection and Aggregated Population Equalization, *International Journal of Remote Sensing*, Vol. 20, No.15&16, pp. 3087-3109. (90%)
- J63 Soh, L.-K. and C. Tsatsoulis (1999). Segmentation for Satellite Imagery of Natural Scenes Using Data Mining, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 37, No. 2, pp. 1086-1099. (95%)
- J64 Soh, L.-K. and C. Tsatsoulis (1999). Texture Analysis of SAR Sea Ice Imagery Using Gray Level Co-occurrence Matrices, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 37, No. 2, pp. 780-795. (90%)
- J65 Haverkamp, D., L.-K. Soh, and C. Tsatsoulis (1995). A Comprehensive, Automated Approach to Determining Sea Ice Thickness from SAR Data, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 33, No. 1, pp. 46-57. (40%)

#### **Reviewed Conference Publications**

- C1 Eck, A., M. Shah, P. Doshi, L.-K. Soh (2020). Scalable Decision-Theoretic Planning in Open and Typed Multiagent Systems, to appear in *Proceedings for the 34<sup>th</sup> AAAI Conference on Artificial Intelligence (AAAI'2020)*, February 7-12, New York, NY.
- C2 Peteranetz<sup>^</sup>, M. and S., L.-K. Soh (2020). A Multi-Level Analysis of the Relationship between Instructional Practices and Retention in Computer Science, to appear in *Proceedings for the 51st ACM Technical Symposium on Computing Science Education (SIGCSE'2020)*, Portland, OR, March 11-14, 2020.
- C3 Peteranetz<sup>^</sup>, M., P. M. Morrow, and S., L.-K. Soh (2020). Development and Validation of the Computational Thinking Concepts and Skills Test, to appear in *Proceedings for the 51st ACM Technical Symposium on Computing Science Education (SIGCSE'2020)*, Portland, OR, March 11-14, 2020.
- C4 Peteranetz<sup>^</sup>, M. S., L.-K. Soh, and E. Ingraham (2019). Building Computational Creativity in an Online Course for Non-Majors, *Proceedings for the 50<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2019)*, Minneapolis, MN, February 25-March 1, 2019, pp. 442-448.
- C5 Miller<sup>^</sup>, L. D., L.-K. Soh, and M. S. Peteranetz<sup>^</sup> (2019). Investigating the Impact of Group Size on Non-Programming Exercises in CS Education Courses, *Proceedings for the 50<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2019)*, Minneapolis, MN, February 25-March 1, 2019, pp. 22-28.
- C6 Loizzo, J., L.-K. Soh, et al. (2019). Creating a MOOCocracy: The Development of New Learner-Centered MOOC Tools for Public Engagement, (Extended Abstract). Paper presented at *Online Learning Consortium (OLC) Innovate 2019*, April 3-5, 2019, Denver, CO.
- C7 Peteranetz<sup>^</sup>, M. S. and L.-K. Soh (2019). Predicting retention in undergraduate computer science courses: Perceived instrumentality and attendance. Paper presented at the *American Educational Research Association Annual Conference (AERA)*, Toronto, ON, Canada.
- C8 Peteranetz<sup>^</sup>, M. S., D. F. Shell, L.-K. Soh, E. Ingraham, and A. Flanigan\* (2018). IUUSE Computational Creativity: Improving Learning, Achievement, and Retention in Computer Science for CS and non-CS Undergraduates, *Proceedings of the 2018 ASEE Annual Conference and Exposition*, Salt Lake City, UT, June 23-27.
- C9 Peteranetz\*, M. S., A. E. Flanigan\*, D. F. Shell, and L.-K. Soh (2018). Future-Oriented Motivation and Retention in Computer Science, *Proceedings of the 49<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2018)*, Baltimore, MD, February 21-24, 2018, pp. 350-355.
- C10 Peteranetz\*, M. S., S. Wang, D. F. Shell, A. E. Flanigan\*, and L.-K. Soh (2018). Examining the Impact of Computational Creativity Exercises on College Computer Science Students' Learning, Achievement, Self-Efficacy, and Creativity, *Proceedings of the 49<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2018)*, Baltimore, MD, February 21-24, 2018, pp. 155-160.

- C11 Soh, L.-K., E. Lorang, and Y. Liu (2018). Aida: Intelligent Image Analysis to Automatically Detect Poems in Digital Archives of Historic Newspapers, *Proceedings of the 30th AAAI Conference on Innovative Applications of Artificial Intelligence (IAAI-18)*, New Orleans, USA, Feb. 2-7, 2018, pp. 7837-7842.
- C12 Wang, S., D. F. Shell, A. E., Flanigan\*, M. Peteranetz\*, and L.-K. Soh (2017). Impact of Creative Competency Exercises on College Computer Science Students' Learning, Achievement, Self-Efficacy, and Creativity, *2016 American Educational Research Association (AERA) Annual Meeting*, San Antonio, TX.
- C13 Joshi, D., S. Basnet, H. Arunachalam, L.-K. Soh, A. Samal, S. Ratcliff\*, and R. Werum (2017). SURGE – Social Unrest Reconnaissance Gazetteer (Demo Paper), *Proceedings of the 25th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL 2017)*, November 7-10, Redondo Beach, CA.
- C14 Shell, D., L.-K. Soh, A. E. Flanigan\*, M. Peteranetz\*, and E. Ingraham (2017). Improving Students' Learning and Achievement in CS Classrooms through Computational Creativity Exercises that Integrate Computational and Creative Thinking, *Proceedings of the 48<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2017)*, Seattle, WA, March 8-11, 2017, pp. 543-548. (Selected as one of 26 exemplary papers at the conference, out of 105 accepted papers, and 348 submitted.)
- C15 Peteranetz, M.\*, A. E. Flanigan\*, D. F. Shell, and L.-K. Soh (2016). Perceived Instrumentality and Career Aspirations in CS1 Courses: Changes and Relationships with Achievement, in *Proceedings of the 2016 ACM Conference on International Computing Education Research (ICER'16)*, September 8-12, Melbourne, Australia, pp. 13-21.
- C16 Chandrasekaran\*, M., A. Eck, P. Doshi, and L.-K. Soh (2016). Individual Planning in Open and Typed Agent Systems, in *Proceedings of the International Conference on Uncertainty in Artificial Intelligence (UAI'2016)*, June 25-29, New York City, NY, pp. 82-91.
- C17 Chen, B., A. Eck, and L.-K. Soh (2016). Collaborative Human Task Assignment for Open Systems (Extended Abstract), in *15th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'16)*, May 9-14, Singapore, pp. 1441-1442.
- C18 Soh, L.-K., E. Ingraham, and D. Shell (2016). Computational Creativity and Computer Science Education, accepted to *NSF Symposium on Envisioning the Future of Undergraduate STEM Education (EnFUSE'2016): Research and Practice*, April 27-29, 2016, Washington, D.C.
- C19 Peteranetz, M.\*, A. E. Flanigan\*, D. F. Shell, and L.-K. Soh (2016) The Relationship between Changes in Implicit Intelligence Theories and Achievement in Computer Science, *2016 American Educational Research Association (AERA) Annual Meeting*, Washington, D.C., April 8-12, 2016.
- C20 Shell, D., L.-K. Soh, A. E. Flanigan\*, and M. Peteranetz\* (2016) Students' Initial Course Motivation and Their Achievement and Retention in Undergraduate Computer Science Courses, *2016 American Educational Research Association (AERA) Annual Meeting*, Washington, D.C., April 8-12, 2016.
- C21 Flanigan\*, A., M. Peteranetz\*, D. F. Shell, and L.-K. Soh (2016). Students' Initial Course Motivation and Their Achievement and Retention in College CS1 Courses, in *Proceedings of the 47<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2016)*, Memphis, TN, March 2-5, pp. 639-644.
- C22 Eck, A., L.-K. Soh, and D. F. Shell (2016). Investigating Differences in Wiki-based Collaborative Activities between Student Engagement Profiles in CS1, in *Proceedings of the 47<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE'2016)*, Memphis, TN, March 2-5, pp. 36-41.
- C23 Flanigan\*, A., M. Peteranetz\*, D. F. Shell, and L.-K. Soh (2015). Exploring Changes in Computer Science Students' Implicit Theories of Intelligence Across the Semester, in *Proceedings of the International Computing Education Research (ICER'2015)*, Omaha, NE, August 9-13, pp. 161-168. (20%)
- C24 Eck, A. and L.-K. Soh (2015). To Ask, Sense, or Share: Ad Hoc Information Gathering, in *Proceedings of the 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'15)*, Bordini, Elkind, Weiss, Yolum (eds.), Istanbul, Turkey, May 4-8, 2015, pp. 367-376.
- C25 Chen, B., X. Chen, A. Timsina, and L.-K. Soh (2015). Considering Agent and Task Openness in Ad Hoc Team Formation (Extended Abstract), in *Proceedings of the 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'15)*, Bordini, Elkind, Weiss, Yolum (eds.), Istanbul, Turkey, May 4-8, 2015, pp. 1861-1862.

- C26 Pytlikzillig, L. M., S. Wang\*, L.-K. Soh, A. J. Tomkins, and A. Samal (2015). The Role of Trustworthiness Perceptions in Support for and Resistance to Hacktivism, in *Proceedings of the 87<sup>th</sup> Annual Meeting of Midwestern Psychological Association*, April 30 – May 2, 2015, Chicago, IL.
- C27 Patterson Hazley\*, M., D. F. Shell, L.-K. Soh, L. D. Miller, V. Chiriacescu, and E. Ingraham (2014). Changes in Student Goal Orientation across the Semester in Undergraduate Computer Science Courses, in *Proceedings of the Frontiers in Education (FIE'2014)*, Madrid, Spain, October 22-25, pp. 2278-2284. (10%) **Finalist for Best Paper Award**
- C28 Shell, D. F., M. Patterson Hazley\*, L.-K. Soh, L. D. Miller, V. Chiriacescu, and E. Ingraham (2014). Improving Learning of Computational Thinking Using Computational Creativity Exercises in a College CS1 Computer Science Course for Engineers, in *Proceedings of the Frontiers in Education (FIE'2014)*, Madrid, Spain, October 22-25, pp. 3029-3036. (10%) **Finalist for Best Paper Award**
- C29 Shell, D. F., L.-K. Soh, and V. Chiriacescu (2014). Modeling Self-Efficacy with the Computational Unified Learning Model, in *Proceedings of the 13th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC14)*, London, UK, August 18-20, 2014, pp. 117-125. (20%)
- C30 Shell, D., L.-K. Soh, M.P., Hazley\*, E. Ingraham, and S. Ramsay (2014) Impact of Creative Competency Exercises in College Computer Science Courses on Students' Creativity and Learning, *2014 American Educational Research Association (AERA) Annual Meeting*, Pennsylvania, PA, April 3-7, 2014. (10%)
- C31 Shell, D. and L.-K. Soh (2013). Motivational Profiles of Engineering Students Taking a Non-major Technical, Required Course, *2013 American Educational Research Association (AERA) Annual Meeting*, San Francisco, CA, April 27-May 1, 2013. (15%)
- C32 Lorang, E., L.-K. Soh, J. Lunde, & G. Thomas\* (2014). Detection of Poetic Content in Historic Newspapers through Image Analysis, in *Proceedings of the 6<sup>th</sup> Joint International Conference of the Alliance of Digital Humanities Organizations (Digital Humanities DH'2014)*, Lousanne, Switzerland, July 7-12, 2014, pp. 248-249. (Extended Abstract) (25%)
- C33 Eck, A. and L.-K. Soh (2014). Online Heuristic Planning for Highly Uncertain Domains, in *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS'2014)*, Paris, France, May 5-9, 2014, pp. 741-748. (15%)
- C34 Miller, L. D., L.-K. Soh, V. Chiriacescu, E. Ingraham, D. F. Shell, and M. Patterson Hazley\* (2014). Integrating Computational and Creative Thinking to Improve Learning and Performance in CS1, *Proceedings of the 45th ACM Technical Symposium on Computer Science Education (SIGCSE'2014)*, March 5-8, Atlanta, GA, pp. 475-480. (25%)
- C35 Chiriacescu, V., L.-K. Soh, and D. F. Shell (2013). Understanding Human learning Using a Multiagent Simulation of the Unified Learning Model, in *Proceedings of the 12<sup>th</sup> International Conference on Cognitive Informatics & Cognitive Computing*, July 16-18, Fordham University, NY, pp. 143-152. (20%)
- C36 Eck, A., L.-K. Soh, and C. Brassil (2013). Supporting Active Wiki-based Collaboration. *Proceedings of the 10th International Conference on Computer Supported Collaborative Learning (CSCL'13)*, Madison, Wisconsin, June 15-19, 2013, pp. 176-183. (10%)
- C37 Soh, L.-K., N. Khandaker, and W. G. Thomas (2013). Digital Histories for the Digital Age: Collaborative Writing in Large Lecture Courses, in *Proceedings of IADIS International Conference eLearning (EL'2013)*, Prague, Czech Republic, July 23-26, 2013. (40%)
- C38 Miller, L.D. and L.-K. Soh (2013). Significant Predictors of Learning from Student Interactions with Online Learning Objects, in *Proceedings of the Frontiers in Education Conference (FIE'2013)*, Oklahoma City, OK, October 23-26, pp. 203-209. (15%)
- C39 Shell, D. F., M. Patterson Hazley\*, L.-K. Soh, E. Ingraham, and S. Ramsay (2013). Association of Students' Creativity, Motivation, and Self-Regulation with Learning and Achievement in College Computer Science Courses, in *Proceedings of the Frontiers in Education Conference (FIE'2013)*, Oklahoma City, OK, October 23-26, pp. 1637-1643. (10%)
- C40 Miller, L. D., L.-K. Soh, V. Chiriacescu, E. Ingraham, D. F. Shell, S. Ramsay, and M. Patterson Hazley\* (2013). Improving Learning of Computational Thinking Using Creative Competency Exercises in College

- CS-1 Computer Science Courses, in *Proceedings of the Frontiers in Education Conference (FIE'2013)*, Oklahoma City, OK, October 23-26, pp. 1426-1432. (18%)
- C41 Miller, L.D. and L.-K. Soh (2013). Meta-Reasoning Algorithms for Improving Analysis of Student Interactions with Learning Objects using Supervised Learning, in *Proceedings of the 6<sup>th</sup> International Conference on Educational Data Mining (EDM'2013)*, Memphis, TN, July 6-9, pp. 129-136. (25%)
- C42 Eck, A. & Soh, L.-K. 2013. Dynamic Facts within Large Team Information Sharing (Extended Abstract). *Proceedings of the 12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, Ito, Jonker, Gini, and Shehory (eds.), Saint Paul, Minnesota, May 8-10, 2013, pp. 1217-1218. (Extended Abstract) (15%)
- C43 Eck, A., Soh, L.-K., Devlin, S., and Kudenko, D. (2013). Potential-Based Reward Shaping for POMDPs (Extended Abstract). *Proceedings of the 12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, Ito, Jonker, Gini, and Shehory (eds.), Saint Paul, Minnesota, May 8-10, 2013, pp. 1123-1124. (Extended Abstract) (10%)
- C44 Eck, A. and Soh, L.-K. 2012. Evaluating POMDP Rewards for Active Perception (Extended Abstract). *Proceedings of the 11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12)*, Conitzer, Winikoff, Padgham, and van der Hoek (eds.), Valencia, Spain, June 6-8, 2012. (Extended Abstract) (15%)
- C45 Jumadinova, J., P. Dasgupta, and L.-K. Soh (2012). Strategic Capability-Learning for Improved Multi-Agent Collaboration in Ad-Hoc Environments, in *Proceedings of the 2012 IEEE/WIC/ACM International Joint Conferences on Web Intelligence and Intelligent Agent Technology (IAT'2012)*, Macau SAR, China, December 4-7, 2012, pp. 287-292. (20%)
- C46 Eck, A. and Soh, L.-K. 2011. Agent Sensing with Stateful Resources (Extended Abstract). *Proceedings of 10th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'11)*, Tumer, Yolum, Sonenberg and Stone (eds.), Taipei, Taiwan, May, 2-6, 2011, pp. 1283-1284. (Extended Abstract) (15%)
- C47 Belli, R. F., L. D. Miller, L.-K. Soh, L. Huang, and A. Cordova (2011). Interviewing Verbal Behaviors that Facilitate Accurate Respondent Autobiographical Memory Retrieval, in *Proceedings of the 9th Biennial Society for Applied Research in Memory and Cognition (SARMAC IX)*, New York, NY, June 27-29, 2011. (10%)
- C48 Nugent, G., K. Kupzyk\*, L.D. Miller, L. Masmaliyeva, L.-K. Soh, and A. Samal (2011). A Learning Analytic Approach to Identify Attributes of Learners and Multimedia Instruction that Influence Learning, in *Proceedings of the World Conference on Educational Multimedia, Hypermedia, and Telecommunications (ED-MEDIA'2011)*, Lisbon, Portugal, June 27-July 1, 2011, pp. 2021-2028. (10%)
- C49 Miller, L. D., L.-K. Soh, B. Neilsen†, E. Lam†, A. Samal, K. Kupzyk\*, and G. Nugent (2011). Revising Computer Science Learning Objects from Learner Interaction Data, in *Proceedings of the 42nd Technical Symposium on Computer Science Education (SIGCSE'2011)*, Houston, TX, March 9-12, 2011, pp. 45-50. (25%)
- C50 Miller, L. D., L.-K. Soh, A. Samal, G. Nugent, K. Kupzyk\*, and L. Masmaliyeva (2011). Evaluating the Use of Learning Objects in CS1, in *Proceedings of the 42nd Technical Symposium on Computer Science Education (SIGCSE'2011)*, Houston, TX, March 9-12, 2011, pp. 57-62. (25%)
- C51 Khandaker, N. and L.-K. Soh (2010). Assessing Individual Contributions to Groupwork by a Summary of Tracked Micro-Level Computer-Supported Collaborative Activities, to appear in *Frontiers in Education (FIE'2010)*, Arlington, Washington, DC, October 27-30, pp. S1E-1-S1E-6. (25%)
- C52 Khandaker, N. and L.-K. Soh (2010). A Wiki with Multiagent Tracking, Modeling, and Coalition Formation, *Proceedings of the 22nd Innovative Applications of Artificial Intelligence Conference (IAAI'2010)*, Atlanta, GA, July 12-14, 2010, pp. 1799-1806.
- C53 Joshi, D., L.-K. Soh, and A. Samal (2009). Redistricting Using Heuristic-Based Polygonal Clustering, *Proceedings of the IEEE International Conference on Data Mining (ICDM'2009)*, Miami, FL, December 6-9, 2009, pp. 171-178. (20%)

- C54 Joshi, D., A. Samal, and L.-K. Soh (2009). A Dissimilarity Function for Clustering Geospatial Polygons, *Proceedings of the 17<sup>th</sup> International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2009)*, Seattle, Washington, November 4-6, 2009, pp. 384-387. (15%)
- C55 Nugent, G., K. Kupzyk\*, S. A. Riley, L. D. Miller, J. Hostetler†, L.-K. Soh, and A. Samal (2009). Empirical Usage Metadata in Learning Objects, *Proceedings of the Frontiers in Education (FIE'2009)*, San Antonio, Texas, October 18-21, 2009, pp. W1F-1 – W1F-6. (10%)
- C56 Joshi, D., A. Samal, and L.-K. Soh (2009). Density-Based Clustering of Polygons, *IEEE Symposium on Computational Intelligence and Data Mining (IEEE CIDM 2009)*, Nashville, TN, March 30 – April 2, 2009, pp. 171-178. (10%)
- C57 Riley, S., L. D. Miller, L.-K. Soh, A. Samal, and G. Nugent (2009). Intelligent Learning Object Guide (iLOG): A Framework for Automatic Empirically-Based Metadata Generation, *Proceedings of the International Conference on Artificial Intelligence in Education (AIED'2009)*, Brighton, UK, July 6-10, 2009, pp. 515-522. (20%)
- C58 Soh, L.-K., A. Samal, S. Scott, S. Ramsay, E. Moriyama, G. Meyer, B. Moore, W. G. Thomas, and D. F. Shell (2009). Renaissance Computing: An Initiative for Promoting Student Participation in Computing, in *Proceedings of the 40th Technical Symposium on Computer Science Education (SIGCSE'2009)*, Chattanooga, Tennessee, March 4-7, 2009, pp. 59-63. (75%)
- C59 Hong, T., A. Samal, and L.-K. Soh (2008). Computing Information Gain for Spatial Data Support, *Proceedings of the 16th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS 2008)*, Irvine, CA, November 5-7, pp. 431-434. (20%)
- C60 Hemsath, T., R. Williams, R. Bonnstetter, and L.-K. Soh (2008). Digital CAD/CAM Pedagogy Model: Intelligent Inquiry Education, in *Proceedings of the Association for Computer-Aided Design in Architecture Conference (ACADIA 2008)*, Minneapolis, MN, October 12-16, 2008, pp. 458-463. (5%)
- C61 Nugent, N., L.-K. Soh, A. Samal, and L. D. Miller (2008). Embedding and Validating Empirical Usage Intelligence in Learning Objects, in *Proceedings of the World Conference on Educational Multimedia, Hypermedia & Telecommunications (ED-MEDIA'2008)*, Vienna, Austria, June 30 – July 4, 2008, pp. 4884-4889. (30%)
- C62 Spradling, C., L.-K. Soh, and C. Ansorge (2008). Ethics Training and Decision-Making: Do Computer Science Programs Need Help? *Proceedings of the SIGCSE'2008*, Portland, Oregon, March 12-15, pp. 153-157. (Also published in *ACM SIGCSE Bulletin*, **40**(1):153-157) (15%)
- C63 Adamchuk, V. I., D. B. Marx, A. T. Kerby, A. K. Samal, L.-K. Soh, R. B. Ferguson, and C. S. Wortmann (2007). Guided Soil Sampling for Enhanced Analysis of Georeferenced Sensor-Based Data, in *Proceedings of the Geocomputation'2007*, NUI Maynooth, Ireland, September 3-5, 2007. (5%)
- C64 Miller, L. D., A. Eck, L.-K. Soh, and H. Jiang (2007). Statistics and Analysis Tools for a Computer-Supported Collaborative Learning System, in *Proceedings of the Frontiers in Education (FIE'2007)*, October 10-13, Milwaukee, Wisconsin, pp. F3J-1-F3J-6. (20%)
- C65 Eck, A., L.-K. Soh, H. Jiang, and T. Chou (2007). Testing Collaborative Traffic over Wireless Protocols, in *Proceedings of the Frontiers in Education (FIE'2007)*, October 10-13, Milwaukee, Wisconsin, pp. F4J-11-F4J-16. (25%)
- C66 Soh, L.-K. (2007). Integrated Introspective Case-Based Learning for Intelligent Tutoring Systems, in *Proceedings of the 22<sup>nd</sup> AAAI Conference on Artificial Intelligence (AAAI'07)*, July 22-26, Vancouver, British Columbia, Canada, pp. 1566-1571.
- C67 Soh, L.-K. and N. Khandaker (2007). Forming and Scaffolding Human Coalitions with a Multiagent Framework, in *Proceedings of the International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'2007)*, Honolulu, Hawaii, May 14-18, pp. 394-396. (65%)
- C68 Khandaker, N., L.-K. Soh, and H. Jiang (2006). Student Learning and Team Formation in a Structured CSCL Environment, in *Proceedings of the International Conference on Computers in Education (ICCE'2006)*, Beijing, China, November 30-December 4, pp. 185-192. (20%)
- C69 Soh, L.-K. (2006). Implementing the Jigsaw Model in CS1 Closed Labs, in *Proceedings of the 11<sup>th</sup> Annual SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE'2006)*, Bologna, Italy, June 26-28, pp. 162-167.

- C70 Soh, L.-K., N. Khandaker, and H. Jiang (2006). Multiagent Coalition Formation for Computer-Supported Cooperative Learning, in *Proceedings of the Innovative Applications of Artificial Intelligence (IAAI'2006)*, July 17-20, Boston, MA, pp. 1844-1851. (70%)
- C71 Soh, L.-K., N. Khandaker, X. Liu, and H. Jiang (2006). A Computer-Supported Cooperative Learning System with Multiagent Intelligence, in *Proceedings of the International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'2006)*, Hakodate, Japan, May 8-12, 2006, pp. 1556-1563. (60%)
- C72 Soh, L.-K. and H. Jiang (2006). Commercializing a Multiagent-Supported Collaborative System, in *Proceedings of the International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'2006)*, Hakodate, Japan, May 8-12, 2006, pp. 1522-1529. (75%)
- C73 Soh, L.-K. (2006). Incorporating an Intelligent Tutoring System into CS1, in *Proceedings of the 37th SIGCSE Technical Symposium on Computer Science Education (SIGCSE'2005)*, Houston, TX, March 1-5, 2006, pp. 505-509.
- C74 Soh, L.-K., N. Khandaker, X. Liu, and H. Jiang (2005). Computer-Supported Structured Cooperative Learning, in *Proceedings of International Conference on Computers in Education (ICCE'2005)*, Singapore, November 28 – December 2, 2005, pp. 428-435. (50%)
- C75 Soh, L.-K. and L. D. Miller (2005). Analyzing Student Motivation and Self-Efficacy in Using an Intelligent Tutoring System, in *Proceedings of International Conference on Computers in Education (ICCE'2005)*, Singapore, November 28 – December 2, pp. 896-899. (65%)
- C76 Soh, L.-K. and T. Blank (2005). An Intelligent Agent that Learns How to Tutor Students: Design and Results, in *Proceedings of International Conference on Computers in Education (ICCE'2005)*, Singapore, November 28 – December 2, pp. 420-427. **Best Paper Award**. (70%)
- C77 Zhang, X., L.-K. Soh, X. Liu, and H. Jiang (2005). Intelligent Collaborating Agents to Support Teaching and Learning, in *Proceedings of the International Electro-Information Technology Conference (EIT'2005)*, Lincoln, NE, May 22-25, 2005. (20%)
- C78 Yu†, G., L.-K. Soh, and A. Bond (2005). K-Means Clustering with Multiresolution Peak Detection, in *Proceedings of the International Electro-Information Technology Conference (EIT'2005)*, Lincoln, NE, May 22-25, 2005. (20%)
- C79 Kite, J. and L.-K. Soh (2005). An Online Survey Framework Using the Life Events Calendar, in *Proceedings of the International Electro-Information Technology Conference (EIT'2005)*, Lincoln, NE, May 22-25, 2005. (15%)
- C80 Soh, L.-K., T. Blank, L. D. Miller, and S. Person (2005). ILMDA: An Intelligent Learning Materials Delivery Agent and Simulation, in *Proceedings of the International Electro-Information Technology Conference (EIT'2005)*, Lincoln, NE, May 22-25, 2005. (45%)
- C81 Fu, L., L.-K. Soh, and A. Samal (2005). Computing Quality of Data for Data Fusion Applications, in *Proceedings of the 8<sup>th</sup> International Conference on GeoComputation (GeoComputation'2005)*, Ann Arbor, MI, August 1-3, 2005. (35%)
- C82 Zhang, J., A. Samal, and L.-K. Soh (2005). Polygon-Based Spatial Clustering, in *Proceedings of the 8<sup>th</sup> International Conference on GeoComputation (GeoComputation'2005)*, Ann Arbor, MI, August 1-3, 2005. (15%)
- C83 Soh, L.-K. and C. Chen (2005). Balancing Ontological and Operational Factors in Refining Multiagent Neighborhoods, in *Proceedings of the International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'2005)*, Utrecht, Netherlands, pp. 745-752. (65%)
- C84 Liu, X., H. Jiang, and L.-K. Soh (2005). Exploiting the Advantages of Object-Based DSM in A Heterogeneous Cluster Environment, in *Proceedings of the 5th IEEE/ACM International Symposium on Cluster Computing and the Grid (CCGRID'2005)*, Cardiff, UK, May. (15%)
- C85 Nugent, G., L.-K. Soh, A. Samal, S. Person, and J. Lang\*(2005). Design, Development, and Evaluation of a CS1 Learning Object for CS1, in *Proceedings of the 10<sup>th</sup> Annual SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE'2005)*, Monte de Caparica, Portugal, June 27-29, 2005, p. 370. (Extended Abstract). (25%)

- C86 Soh, L.-K., A. Samal, S. Person, G. Nugent, J. Lang\* (2005). Analyzing Relationships between Closed Labs and Course Activities in CS1, in *Proceedings of the 10<sup>th</sup> Annual SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE '2005)*, Monte de Caparica, Portugal, June 27-29, 2005, pp. 183-187. (40%)
- C87 Liu, X., H. Jiang, and L.-K. Soh (2005). The Object-Based Distributed File System Built on Storage Area Network, in *Proceedings of ALAR Conference on Applied Research in Information Technology (ALAR '2005)*, Conway, AR, USA, February. (10%)
- C88 Soh, L.-K., A. Samal, S. Person, G. Nugent, J. Lang\* (2005). Designing, Implementing, and Analyzing a Placement Test for Introductory CS Courses, in *Proceedings of the 36th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '2005)*, St. Louis, MO, February 23-27, 2005, pp. 505-509. (45%)
- C89 Soh, L.-K., A. Samal, S. Person, G. Nugent, J. Lang\* (2005). Closed Laboratories with Embedded Instructional Research Design for CS1, in *Proceedings of the 36th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '2005)*, St. Louis, MO, February 23-27, 2005, pp. 297-301. (55%)
- C90 Bernadt†, J. J. and L.-K. Soh (2004). Authoritative Citation KNN Learning in Multiple-Instance Problems, in *Proceedings of the International Conference on Machine Learning and Applications (ICMLA '2004)*, Louisville, KY, December 16-18, 2004, pp. 410-417. (25%)
- C91 Blank, T., L. D. Miller, L.-K. Soh and S. Person (2004). Case-Based Learning Mechanisms to Deliver Learning Materials, in *Proceedings of the International Conference on Machine Learning and Applications (ICMLA '2004)*, Louisville, KY, December 16-18, 2004, pp. 423-428. (20%)
- C92 Blank, T., L.-K. Soh and S. Scott (2004). Creating a SVM to Play Strong Poker, in *Proceedings of the International Conference on Machine Learning and Applications (ICMLA '2004)*, Louisville, KY, December 16-18, 2004, pp. 150-155. (20%)
- C93 Glasser, J. and L.-K. Soh (2004). Learning in a Real-Time, Dynamic Environment, in *Proceedings of the International Conference on Machine Learning and Applications (ICMLA '2004)*, Louisville, KY, December 16-18, 2004, pp. 57-64. (15%)
- C94 Li, X. and L.-K. Soh (2004). Learning How to Plan and Instantiate a Plan in Multi-Agent Coalition Formation, in *Proceedings of the 2004 IEEE/WIC International Conference on Intelligent Agent Technology (IAT2004)*, Beijing, China, September 20-24, pp. 133-139. (20%)
- C95 Bernadt†, J. J. and L.-K. Soh (2004). Authoritative Citation KNN Learning with Noisy Training Datasets, in *Proceedings of the International Conference on Machine Learning, Models, Technologies and Applications (MLMTA '04)*, Las Vegas, NV, June 21-24, 2004, pp. 916-921. (35%)
- C96 Soh, L.-K. and X. Li (2004). Multiagent Coalition Formation for Distributed, Adaptive Resource Allocation, in *Proceedings of the International Conference on Artificial Intelligence (ICAI '2004)*, Las Vegas, NV, June 21-24, 2004, pp. 372-378. (65%)
- C97 Chen, C. and L.-K. Soh (2004). Adaptive Learning to Optimize Resource Management in a Multiagent Framework, in *Proceedings of the International Conference on Artificial Intelligence (ICAI '2004)*, Las Vegas, NV, June 21-24, 2004, pp. 386-389. (40%)
- C98 Soh, L.-K. and X. Li (2004). Adaptive, Confidence-Based Multiagent Negotiation Strategy, in *Proceedings of the International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS '2004)*, New York, NY, July 19-23, 2004, pp. 1048-1055. (65%)
- C99 Liu, X., H. Jiang, and L.-K. Soh (2004). A Distributed Shared Object Model Based on a Hierarchical Consistency Protocol for Heterogeneous Clusters, in *Proceedings of IEEE International Symposium on Cluster Computing and the Grid (CCGRID '2004)*, Chicago, IL, April 19-22, 2004, pp. 515-522. (15%)
- C100 Soh, L.-K. (2004). Cautious Cooperative Learning with Case-Based Reasoning, in *Proceedings of the FLAIRS '2004*, Miami Beach, FL, May 16-19, pp. 196-201.
- C101 Soh, L.-K. (2004). Experience-Based Resource Description and Selection in Multiagent Information Retrieval, in *Proceedings of the FLAIRS '2004*, Miami Beach, FL, May 16-19, pp. 8-13.
- C102 Soh, L.-K. (2004). Using Game Days to Teach a Multiagent Systems Class, in *Proceedings of the 35<sup>th</sup> Technical Symposium on Computer Science Education (SIGCSE '2004)*, Norfolk, VA, March 3-7, 2004, pp. 219-223.

- C103 Soh, L.-K. H. Jiang, and C. Ansoerge (2004). Agent-Based Cooperative Learning: A Proof-of-Concept Experiment, in *Proceedings of the 35<sup>th</sup> Technical Symposium on Computer Science Education (SIGCSE '2004)*, March 3-7, Norfolk, VA, pp. 368-372. (65%)
- C104 Liu, X., X. Zhang, L.-K. Soh, J. Al-Jaroodi\*, and H. Jiang (2003). A Distributed, Multiagent Infrastructure for Real-Time, Virtual Classrooms, in *Proceedings of the International Conference on Computers in Education (ICCE2003)*, Hong Kong, China, December 2-5, pp. 640-647. (15%)
- C105 Li, X. and L.-K. Soh (2003). The Use of Hybrid Negotiation in Resource Coordination among Agents, in *Proceedings of the 2003 IEEE/WIC International Conference on Intelligent Agent Technology (IAT2003)*, Halifax, Canada, October 13-17, 2003, 133-139. (40%)
- C106 Soh, L.-K. and C. Tsatsoulis (2003). Utility-Based Multiagent Coalition Formation with Incomplete Information and Time Constraints, in *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics*, Washington, D.C., October 5-8, 2003, pp. 1481-1486. (75%)
- C107 Liu, X., X. Zhang, J. Al-Jaroodi\*, P. Vemuri, H. Jiang, and L.-K. Soh (2003). I-MINDS: An Application of Multiagent System Intelligence to On-Line Education, in *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics*, Washington, D.C., October 5-8, 2003, pp. 4864-4871. (20%)
- C108 Soh, L.-K. (2003). Teaching with Game Days: Designs, Expectations, and Lessons Learned, in *Proceedings of the 38<sup>th</sup> American Society for Engineering Education (ASEE) Midwest Section Conference*, University of Missouri-Rolla, MO, September 10-12.
- C109 Soh, L.-K. and X. Li (2003). An Integrated Multilevel Learning Approach to Multiagent Coalition Formation, in *Proceedings of the 18<sup>th</sup> International Joint Conference on Artificial Intelligence (IJCAI'2003)*, Acapulco, Mexico, August 12-15, 2003, pp. 619-624. (60%)
- C110 Soh, L.-K. and X. Li (2003). A Learning-Based Coalition Formation Model for Multiagent Systems, *Proceedings of the 2<sup>nd</sup> International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'03)*, Melbourne, Australia, July 14-18, 2003, pp. 1120-1121. (Extended Abstract) (70%)
- C111 Soh, L.-K. and J. Luo (2003). Combining Individual and Cooperative Learning for Multiagent Negotiations, in *Proceedings of the 2<sup>nd</sup> International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'03)*, Melbourne, Australia, July 14-18, 2003, pp. 1122-1123. (Extended Abstract) (75%)
- C112 Soh, L.-K. and C. Tsatsoulis (2002). Satisficing Coalition Formation among Agents, in *Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS'02)*, Bologna, Italy, July 15-19, 2002, pp. 1062-1063. (Extended Abstract) (85%)
- C113 Soh, L.-K. (2002). Image Processing Techniques for Describing Sea Ice Features, in *Proceedings of the 2002 International Geoscience and Remote Sensing Symposium (IGARSS'02)*, Toronto, Canada, June 24-28, 2002, pp. 309-311.
- C114 Soh, L.-K. and C. Tsatsoulis (2001). Combining Genetic Algorithms and Case-Based Reasoning for Genetic Learning of a Case Library: A Conceptual Framework, in *Proceedings of the Late-Breaking Papers of Genetic and Evolutionary Computation Conference (GECCO'01)*, San Francisco, CA, July 7-11, pp. 376-383. (90%)
- C115 Soh, L.-K. and C. Tsatsoulis (2001). Reflective Negotiating Agents for Real-Time Multisensor Target Tracking, in *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI'01)*, Seattle, WA, August 6-11, pp. 1121-1127. (90%)
- C116 Soh, L.-K., C. Tsatsoulis, M. Jones, and A. Agah (2001). Evolving Cases for Case-Based Reasoning Multiagent Negotiations, in *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO'01)*, San Francisco, CA, July 7-11, 2001, p. 909. (Extended Abstract) (90%)
- C117 Soh, L.-K. and C. Tsatsoulis (2000). Using Learning by Discovery to Segment Remotely Sensed Images, in *Proceedings of the 17th International Conference on Machine Learning (ICML-2000)*, Stanford, CA, June 29 – July 2, 2000, pp. 919-926. (85%)
- C118 Soh, L.-K. and C. Tsatsoulis (2000). ARKTOS: A Knowledge Engineering Software Package for Satellite Sea Ice, in *Proceedings of the 2000 International Geoscience and Remote Sensing Symposium (IGARSS'00)*, Honolulu, Hawaii, July 24-28, pp. 696-698. (95%)

- C119 Soh, L.-K. and C. Tsatsoulis (1999). Multisource Data and Knowledge Fusion for Intelligent SAR Sea Ice Classification, in *Proceedings of the 1999 International Geoscience and Remote Sensing Symposium (IGARSS'99)*, Hamburg, Germany, June 28-July 2, 1999, pp. 68-70. (80%)
- C120 Soh, L.-K. and C. Tsatsoulis (1999). Adaptive Multiresolution Quantization for Contextual Information Gain in SAR Sea Ice Images, in *Proceedings of the 1999 International Geoscience and Remote Sensing Symposium (IGARSS'99)*, Hamburg, Germany, June 28-July 2, 1999, pp. 1567-1569. (85%)
- C121 Bertoia, C., D. Gineris, K. Partington, L.-K. Soh and C. Tsatsoulis (1999). Transition From Research to Operations: ARKTOS: A Knowledge-Based Sea Ice Classification System, in *Proceedings of the 1999 International Geoscience and Remote Sensing Symposium (IGARSS'99)*, Hamburg, Germany, June 28-July 2, 1999, pp. 1573-1574. (15%)
- C122 Soh, L.-K. and C. Tsatsoulis (1998). Automated Sea Ice Segmentation (ASIS), in *Proceedings of the 1998 International Geoscience and Remote Sensing Symposium (IGARSS '98)*, Seattle, Washington, July 6-10, 1998, pp. 586-588. (90%)
- C123 Soh, L.-K. and C. Tsatsoulis (1998). Data Mining in Remotely Sensed Imagery: A General Model and An Application, in *Proceedings of the 1998 International Geoscience and Remote Sensing Symposium (IGARSS '98)*, Seattle, Washington, July 6-10, 1998, pp. 798-800. (80%)
- C124 Soh, L.-K., C. Tsatsoulis, T. Bowers, and A. Williams (1998). Representing Sea Ice Knowledge in Dempster-Shafer Belief System, in *Proceedings of the International Geoscience and Remote Sensing Symposium (IGARSS '98)*, Seattle, Washington, July 6-10, 1998, 2234-2236. (80%)
- C125 Soh, L.-K. and C. Tsatsoulis (1997). Identifying Classes in SAR Sea Ice Imagery Automatically Using Correlated Texture, in *Proceedings of the 1997 International Geoscience and Remote Sensing Symposium (IGARSS '97)*, Singapore, August 3-8, 1997, pp.1177-1179. (85%)
- C126 Soh, L.-K. and C. Tsatsoulis (1996). Texture Representation of SAR Sea Ice Imagery Using Multi-Displacement Co-Occurrence Matrices, in *Proceedings of the 1996 International Geoscience and Remote Sensing Symposium (IGARSS '96)*, Lincoln, Nebraska, May 27-31, 1996, pp. 112-114. (90%)
- C127 Soh, L.-K. D. Haverkamp, and C. Tsatsoulis (1996). Separating Ice-Water Composites and Computing Floe Size Distributions, in *Proceedings of the 1996 International Geoscience and Remote Sensing Symposium (IGARSS '96)*, Lincoln, Nebraska, May 27-31, 1996, pp. 1532-1534. (60%)
- C128 Soh, L.-K. and C. Tsatsoulis (1996). Determining the Number of Classes for Segmentation in SAR Sea Ice Imagery, in *Proceedings of the 1996 International Geoscience and Remote Sensing Symposium (IGARSS '96)*, Lincoln, Nebraska, May 27-31, 1996, pp. 1565-1567. (65%)
- C129 Sevay, H., L.-K. Soh, and K. Kumar (1994). BIDDER: A CBR Application for Bidding for Software Contracts, in *Proceedings of Mid-America Conference on Intelligent Systems (MACIS '94)*, Overland Park, Kansas, pp. 160--167. (30%)
- C130 Haverkamp, D., L.-K. Soh, and C. Tsatsoulis (1993). A Dynamic Local Thresholding Technique for Sea Ice Classification, in *Proceedings of the 1993 International Geoscience and Remote Sensing Symposium (IGARSS '93)*, Tokyo, Japan, August 18-21, 1993, pp. 638-640. (35%)
- C131 Soh, L.-K. and C. Tsatsoulis (1993). A Feature Extraction Technique for Synthetic Aperture Radar (SAR) Sea Ice Imagery, in *Proceedings of the 1993 International Geoscience and Remote Sensing Symposium (IGARSS '93)*, Tokyo, Japan, August 18-21, 1993, pp. 632-634. (65%)
- C132 Chang, C. C., L.-K. Soh, and C. Tsatsoulis (1992). Experiments in Case-Based Search, in *Proceedings of the First Midwest Electro Technology Conference*, Ames, Iowa. (40%)

#### **Reviewed Workshop Publications**

- W1 Basnet, S., L.-K. Soh, A. Samal, and D. Joshi (2018). Analysis of Multifactorial Social Unrest Events with Spatio-Temporal k-Dimensional Tree-based DBSCAN, in *2<sup>nd</sup> ACM SIGSPATIAL International Workshop on Analytics for Local Events and News (LENS'2018)*, November 6, Seattle, WA.
- W2 Shell, D., L.-K. Soh, E. Ingraham, B. Moore, and S. Ramsey (2016). Research Title: IUSE: Design, Development, and Implementation Projects: Computational Creativity to Improve CS Education for CS and Non-CS Undergraduates, In *Proceedings of the UP CS Education Research Workshop*, at ICER'2016, Sydney, Australia, September 7, 2016, pp. 17-20. (20%)

- W3 Eck, A. and L.-K. Soh (2014). Intelligent Information Sharing for Localized, Non-Stationary Phenomena, in *Proceedings of the 6<sup>th</sup> International Workshop on Emergent Intelligence on Networked Agents (WEI'14)*, at AAMAS'2014, Paris, France, May 5, 2014. (10%)
- W4 Eck, A. and L.-K. Soh (2012). Active Sensing for Opponent Modeling in Poker, in *Proceedings of the 2012 Computer Poker Symposium*, at AAAI'2012, Toronto, Ontario, Canada, July 23, 2012. (15%)
- W5 Eck, A. and L.-K. Soh (2012). Adaptive Knowledge Assistants, in *Proceedings of the First International Workshop on Human-Agent Interaction Design and Models (HAIDM'2012)*, at AAMAS'2012, Valencia, Spain, June 4, 2012. (10%)
- W6 Khandaker, N. and L.-K. Soh (2007). Formation and Scaffolding Human Coalitions in I-MINDS – A Computer-Supported Collaborative Learning Environment, in *Technical Report of the AAMAS'2007 Workshop on Agent-Based Systems for Human Learning and Entertainment (ABSHLE)*, Honolulu, Hawaii, May 14, 2007, pp. 64-75. (20%)
- W7 Li, X. and L.-K. Soh (2004). Investigating Reinforcement Learning in Multiagent Coalition Formation, in *Technical Report WS-04-06 of the AAAI'2004 Workshop on Forming and Maintaining Coalitions and Teams in Adaptive Multiagent Systems*, San Jose, CA, July 26, 2004, pp. 22-28. (35%)
- W8 Soh, L.-K. (2004). On Cooperative Learning Teams for Multiagent Team Formation, in *Technical Report WS-04-06 of the AAAI'2004 Workshop on Forming and Maintaining Coalitions and Teams in Adaptive Multiagent Systems*, San Jose, CA, July 26, 2004, pp. 37-44.
- W9 Li, X., Q. Tao\*, and L.-K. Soh (2004). Learning Negotiation Approach Selection with SVM, in *Proceedings of the AAMAS 2004 Workshop on Learning*, New York, NY, July, 2004, pp. 56-57. (10%)
- W11 Soh, L.-K. (2004). Using Multiagent Profiling for Distributed Information Retrieval, in *Proceedings of the AAMAS 2004 Workshop on Modeling Other Agents from Observations (MOO'04)*, New York, NY, July 2004, pp. 121-124.
- W12 Li, X. and L.-K. Soh (2004). Learning-Based Multi-Phase Coalition Formation, in *Proceedings of the AAMAS 2004 Workshop on Coalitions and Teams*, New York, NY, July, 2004, pp. 9-16. (30%)
- W13 Soh, L.-K. (2003). Collaborative Understanding of Distributed Ontologies in a Multiagent Framework: Design and Experiments, in *Proceedings of AAMAS 2003 Workshop on Ontology in Agent Systems (OAS)*, Melbourne, Australia, July 15, 2003, pp. 47-54.
- W14 Soh, L.-K. and J. Luo (2003). Multiagent Case-Based Reasoning through Individual and Cooperative Learning, in *Proceedings of the IJCAI 2003 Workshop on Agents and Automated Reasoning*, Acapulco, Mexico, August 9, 2003, pp. 44-51. (75%)
- W15 Soh, L.-K., X. Liu, X. Zhang, J. Al-Jaroodi\*, H. Jiang, P. Vermuri (2003). I-MINDS: An Agent-Oriented Information System for Applications in Education, in *Proceedings of AAMAS 2003 Workshop on Agent-Oriented Information Systems (AOIS)*, Melbourne, Australia, July 14-15, 2003, pp. 2-8. (45%)
- W16 Soh, L.-K. (2002). A Multiagent Framework for Collaborative Conceptual Learning Using a Dempster-Shafer Belief System, in *Working Notes of AAAI Spring Symposium on Collaborative Learning Agents*, Stanford, CA, March 25-27, 2002, pp. 9-16.
- W17 Soh, L.-K. and C. Tsatsoulis (2002). Learning to Form Negotiation Coalitions in a Multiagent System, in *Working Notes of AAAI Spring Symposium on Collaborative Learning Agents*, Stanford, CA, March 25-27, 2002, pp. 106-112. (80%)
- W18 Soh, L.-K. and C. Tsatsoulis (2002). Allocation Algorithms in Dynamic Negotiation-Based Coalition Formation, in *Proceedings of the First International Joint Conference on Autonomous Agents and Multi-Agent Systems Workshop on Teamwork and Coalition Formation*, Bologna, Italy, July 15-19, 2002. (85%)
- W19 Soh, L.-K. (2002). Multiagent Distributed Ontology Learning, in *Working Notes of the First International Joint Conference on Autonomous Agents and Multi-Agent Systems Workshop on Ontologies in Agent System*, Bologna, Italy, July 15-19.
- W20 Soh, L.-K. and C. Tsatsoulis (2002). Real-Time Satisficing Multiagent Coalition Formation, in *Working Notes of the AAAI Workshop on Coalition Formation in Dynamic Multiagent Environments*, Edmonton, Alberta, Canada, July 28-August 1, 2002, pp. 7-15. (85%)

- W21 Soh, L.-K. and C. Tsatsoulis (2001). Agent-Based Argumentative Negotiations with Case-Based Reasoning, in *Working Notes of the AAI Fall Symposium Series on Negotiation Methods for Autonomous Cooperative Systems*, North Falmouth, MA, November 1-4, 2001, pp. 16-25. (80%)
- W22 Soh, L.-K. and C. Tsatsoulis (2000). Learning Methodologies and Discriminating Visual Cues for Unsupervised Image Segmentation, in *Working Notes of the 17th International Conference on Machine Learning (ICML-2000) Workshop on Machine Learning on Spatial Knowledge*, Stanford, CA, July 2, 2000, pp. 56-61. (80%)
- W23 Tsatsoulis, C., L.-K. Soh, C. Bertioia, and K. Partington (1999). Intelligent Fusion of Multisource Data for Sea Ice Classification, in *1999 Advanced Course on Artificial Intelligence (ACAI'99), Workshop on Intelligent Techniques for Spatio-Temporal Data Analysis in Environmental Applications*, Chania, Greece, July 5-16, 1999. (40%)
- W24 Soh, L.-K., H. Sevay, and C. Tsatsoulis (1998). MAGE: Multi-Agent Graphical Environment, in *Proceedings of the 1999 AAI Symposium Spring Series, Intelligent Agents in Cyberspace*, Stanford, CA, March 22-24, 1998, pp. 128-135. (45%)
- W25 Haverkamp, D., L.-K. Soh, and C. Tsatsoulis (1994). A Dynamic Local Thresholding Technique for Distinguishing Sea Ice Thickness in SAR Data, in *Proceedings of the Workshop of the International Union of Radio Science (URSI '94)*, Lawrence, Kansas. (30%)

**Other Reviewed Conference Presentations (with abstracts)**

- O1 Loizzo, J., P. Beattie, L.-K. Soh, L. PytlikZillig, J. Morrissey, N. Colgrove, and T. Svoboda. (submitted). Dialogue in a MOOCocracy: Examining participants' posts in a social democratic online collaborative about food insecurity. *Online Learning Consortium (OLC) Accelerate*. Orlando, FL.
- O2 Trainin, G., L.-K. Soh, W. Smith, K. Steen, and G. Nugent (2019). Using Design Methodology to Study CSE in Underserved Communities, Poster Presentation, *2019 Research on Equity & Sustained Participation in Engineering, Computing, & Technology (RESPECT'2019)*, February 27, 2019, Minneapolis, MN.
- O3 PytlikZillig, L. M., L.-K. Soh, and J. Loizzo (2019). MOOCocracy IDEAs for Harnessing and Enhancing "Peopleful Power", Poster Presentation, *2019 Society for the Psychological Study of Social Issues Conference (SPSSI'2019)*, June 21-23, 2019, San Diego, CA.
- O4 Peteranetz, M. S., D. F. Shell, L.-K. Soh, E. Ingraham, and A. Flanigan (2018). IUSE Computational Creativity: Improving Learning, Achievement, and Retention in Computer Science for CS and non-CS Undergraduates, NSF Grantee Poster Session, *2018 ASEE Annual Conference and Exposition*, Salt Lake City, UT, June 23-27, 2018.
- O5 Flanigan, A. E., Peteranetz, M. S., Shell, D. F., & Soh, L.-K. (2018). Examining undergraduate computer science students' shift towards a fixed mindset. Paper presented at the Mid-Western Educational Research Association Annual Conference (MWERA), Cincinnati, OH.
- O6 Flanigan, A. E.\*, M. Peteranetz\*, D. F. Shell, and L.-K. Soh (2017). Change across Time: Exploring How Implicit Intelligence Beliefs of Computer Science Students Change across the Semester, Poster presented at *2017 American Educational Research Association (AERA) Annual Meeting*, San Antonio, TX.
- O7 A. Eck, A. Kirschner, L.-K. Soh, and A. McCutcheon (2017). Should I Stay or Should I Go Now? Adaptive Survey Instruments to Reduce Breakoff in Online Surveys, paper presented at the *Annual Conference of the Midwest Association of Public Opinion Research (MAPOR'2017)*, Chicago, Illinois, November 16-17, 2017.
- O8 Ahuja, P., A. Eck, and L.-K. Soh (2016). Learning an Autonomous Interviewer: First Step from Analyzing Computer-Assisted Interview, paper presented at the *Annual Conference of the Midwest Association of Public Opinion Research (MAPOR'2016)*, Chicago, Illinois, November 18-19, 2016.
- O9 Eck, A. and L.-K. Soh (2017). Sequential Prediction of Respondent Behaviors Leading to Error in Web-based Surveys, in *Proceedings of the 72<sup>nd</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, New Orleans, LA, May 18-21, 2017.

- O10 Stevens, J. R., and L.-K. Soh (2015). Similarity Judgments of Time Delays and Reward Amounts in Intertemporal Choices, Poster presentation at the 56<sup>th</sup> *Psychonomic Society's Annual Meeting*, Chicago, IL, November 19-22. (20%)
- O11 Eck, A., Soh, L.-K., McCutcheon, A.L., & Belli, R.F. (2015). Predicting Survey Outcomes using Sequential Machine Learning Methods. *2015 Annual Conference of the Midwest Association for Public Opinion Research (MAPOR'2015)*, Chicago, Illinois, November 20-21, 2015.
- O12 Wettlaufer, D., H. Arunachalam, G. Atkin, A. Eck, L.-K. Soh, R. F. Belli (2015). Determining Potential for Breakoff in Time Diary Survey Using Paradata, in *Proceedings of the 70<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Hollywood, Florida, May 14-17, 2015. (10%)
- O13 Eck, A., L.-K. Soh, A. L. McCutcheon, and R. F. Belli (2015). Predicting Breakoff Using Sequential Machine Learning Methods, in *Proceedings of the 70<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Hollywood, Florida, May 14-17, 2015. (20%)
- O14 Atkin, G., H. Arunachalam, A. Eck, D. Wettlaufer, L.-K. Soh, and R. F. Belli (2015). Using Machine Learning Techniques to Predict Respondent Type from A Priori Demographic Information, in *Proceedings of the 70<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Hollywood, Florida, May 14-17, 2015. (10%)
- O15 Arunachalam, H., G. Atkin, A. Eck, D. Wettlaufer, L.-K. Soh, and R. F. Belli (2015). I Know What You Did Next: Predicting Respondent's Next Activity Using Machine Learning, in *Proceedings of the 70<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Hollywood, Florida, May 14-17, 2015. (10%)
- O16 Belli, R. F., L. D. Miller, L.-K. Soh, and T. Al Baghal (2015). Using Data Mining to Examine Interviewer-Respondent Interactions in Calendar Interviews, in *Proceedings of the 70<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Hollywood, Florida, May 14-17, 2015. (5%)
- O17 Eck, A., L. Stuart, G. Atkin, L.-K. Soh, A. McCutcheon, A., and R. Belli (2014). Making Sense of Paradata: Challenges Faced and Lessons Learned, in *Proceedings of the 69<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Anaheim, California, May 15-18, 2014. (Poster presentation) (5%)
- O18 Atkin, G., H. Arunachalam, A. Eck, L.-K. Soh, and R. Belli (2014). Designing an Intelligent Time Diary Instrument: Visualization, Dynamic Feedback, and Error Prevention and Mitigation, in *Proceedings of the 69<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Anaheim, California, May 15-18, 2014. (5%)
- O19 Belli, R. F., L. D. Miller, L.-K. Soh, and T. Al Baghal (2013). Predicting the Occurrence of Respondent Retrieval Strategies in Calendar Interviewing: The Quality of Retrospective Reports, in *Proceedings of the 68<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Boston, Massachusetts, May 16-19, 2013. (10%)
- O20 Ruther\*, N., T. Al Baghal, T., Eck, L. C. Stuart, A. L. Phillips\*, R. F. Belli, and L.-K. Soh (2013). Examining the Relationship between Error and Behavior in the American Time Use Survey Using Audit Trail Paradata, in *Proceedings of the 68<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Boston, Massachusetts, May 16-19, 2013. (5%)
- O21 Al Baghal, T., A. L. Phillips\*, N. Ruther\*, R. F. Belli, A. Eck, L. C. Stuart, and L.-K. Soh (2013). What Are You Doing Now? Audit Trails, Activity Level Responses and Error in the American Time Use Survey, in *Proceedings of the 68<sup>th</sup> Annual Conference of the American Association for Public Opinion Research (AAPOR)*, Boston, Massachusetts, May 16-19, 2013. (2%)
- O22 Eck, A., L. D. Miller, and L.-K. Soh (2011). Metareasoning for Opponent Modeling in Texas Hold'em Poker, *AAAI 2011*, San Francisco, CA, August 7-11, 2011. (Poster presentation) (10%)
- O23 Eck, A., D. Lam, and L.-K. Soh (2011). Intelligent User Interfaces for Data Sharing and Documentation, *TDWG 2011*, New Orleans, LA, October. 16-21, 2011. (15%)

- O24 Eck, A., D. Lam, and L.-K. Soh (2010). Investigating Advanced User Support Desired by Computational Biologists, *TDWG 2010*, Woods Hole, MA, Sept. 26-Oct. 1, 2010. (Working Group Session) (10%)
- O25 Eck, A., D. Lam, and L.-K. Soh (2010). An Intelligent Wiki for Supporting Collaborative Research, *TDWG 2010*, Woods Hole, MA, Sept. 26-Oct. 1, 2010. (Poster presentation) (15%)
- O26 Jameson, M. L., F. Ocampo, S. Scott, L.-K. Soh, and I. Cottingham (2010). Transforming Biodiversity Science with the Biofinity Project, *Entomological Collections Network – Annual Meeting*, San Diego, CA, December 11-12, 2010. (5%)
- O27 Samal, A. and L.-K. Soh (2006). A New Similarity Measure for Polygon-Based Spatial Clustering and Its Application in Watershed Study, 2006 Water Colloquium, University of Nebraska, Lincoln, NE, October 27, 2006.
- O28 Nugent, G., J. Lang\*, A. Samal, L.-K. Soh, and S. Person (2004). Reinventing CS Curriculum, *The 2<sup>nd</sup> National Symposium for Information Technology in Education*, June 16-18, Lincoln, NE. (10%)
- O29 Soh, L.-K., H. Jiang, X. Liu, and X. Zhang (2004). I-MINDS, *The 2<sup>nd</sup> National Symposium for Information Technology in Education*, June 16-18, Lincoln, NE. (45%)
- O30 Niehaus, D., C. Tsatsoulis, L.-K. Soh, W. Dinkel, and A. Gautam (2001). An Infrastructure for Real-Time, Reflective Intelligent Agents, *The Ninth International Workshop on Parallel and Distributed Real-Time Systems and Sixth International Workshop on Embedded/ Distributed HPC Systems Applications (WPDRTS 2001 and EHPC 2001)*, April 23-24, 2001, San Francisco, CA. (10%)

#### **Reviewed Short Articles**

- A1 Riedesel, C. and L.-K. Soh (2015). Rise of the Cyber-Savant: Part II, to appear in *Nebraska Educational Technology Association (NETA) Newsletter*, April, 2015, pp. 8-9.
- A2 Riedesel, C. and L.-K. Soh (2015). Rise of the Cyber-Savant: Part I, *Nebraska Educational Technology Association (NETA) Newsletter*, February, 2015, pp. 10-11.
- A3 Soh, L.-K., et al. (2005). The Workshop Program at the Nineteenth National Conference on Artificial Intelligence, *AI Magazine*, **26**(1):102-108. “Forming and Maintaining Coalitions and Teams in Adaptive Multiagent Systems,” pp. 105-106.
- A4 Zhang, J., A. Samal, L.-K. Soh, and W. J. Waltman (2004). Mapping Hydrological Drought in the Great Plains, *ArcUser*, **7**(4):20-22, October-December.

#### **Non-Reviewed Conference Presentations**

- NC1 Soh, L.-K. (2002). Automated Sea Ice Classification, *Operational Sea Ice Symposium*, Solomons, Maryland, September 18-19. (Presentation only)
- NC2 Bertoia, C., M. R. Keller, D. Gineris, L.-K. Soh, and C. Tsatsoulis (2000). Operational Evaluation of a Knowledge-Based Sea Ice Classification System, *World Meteorological Organization (WMO) Steering Group for Global Digital Sea Ice Data Bank – Eighth session and WMO Workshop on Mapping and Archiving Sea Ice Data Derived from Radar Data Processing*, April 30 – May 4, Ottawa, Canada. (10%)
- NC3 Soh, L.-K., C. Tsatsoulis, C. Bertoia, and B. Ramsay (1998). Transition from Research to Operations, ARKTOS: Advanced Reasoning Using Knowledge to Classify Sea Ice, *International Conference on Sea Ice Charts of the Arctic—Scientific Achievements from the First 400 Years*, Seattle, Washington, August 5-7. (75%)
- NC4 Tsatsoulis, C. and L.-K. Soh (1997). ARKTOS: The KU Expert System for Ice Analysis (with demonstration), *6th Radarsat/NIC Working Group Meeting*, National Snow and Ice Data Center, Boulder, Colorado, November 19-20. (50%)
- NC5 Haverkamp, D., L.-K. Soh, and C. Tsatsoulis (1995). The Sea-Ice Classification System of the University of Kansas, *3rd Circumpolar Symposium on Remote Sensing of Arctic Environments*, Fairbanks, Alaska. (20%)
- NC6 Soh, L.-K., S. Cappiello, D. Haverkamp, and C. Tsatsoulis (1993). Analysis of the Distribution of Local Dynamic Classification Thresholds for Sea Ice in ERS-1 Data, *ASF SAR User Meeting*, Seattle, Washington, July 27-29. (40%)

#### **White Papers**

- WP1 Hostetler†, J., L.-K. Soh, and A. Samal (2008). Inclusion of the Sharable State Persistence Model in SCORM 2.0 Would Improve Extensibility, SCORM 2.0 White Paper, <http://www.letsj.org/display/nextscorm/SCORM+2.0+White+Papers> [www.letsj.org].
- WP2 Miller, L., L.-K. Soh, S. Riley, and A. Samal, (2008). Motivation for a Direct Access Tunnel between Content Developers and Learning Objects, SCORM 2.0 White Paper, <http://www.letsj.org/display/nextscorm/SCORM+2.0+White+Papers> [www.letsj.org].
- WP3 Riley, S., L.-K. Soh, and A. Samal, (2008). On the Importance of Metadata and Learner Interaction Data in SCORM 2.0, SCORM 2.0 White Paper, <http://www.letsj.org/display/nextscorm/SCORM+2.0+White+Papers> [www.letsj.org].

### **Talks**

- T1. Williamson, M., L.-K., Soh, D. Minter, and W. Babchuk (2020). Effective Faculty Development Through Faculty Discussion: College-Level Challenges, Goals and Classroom-based Strategies to Promote Student Discussion, Part I and Part II, UNL Spring Teaching and Learning Symposium, February 28, 2020, Lincoln, NE.
- T2. Soh, L.-K., Lorang, E., Y. Liu, and C. Pack (2019). Digital Libraries, Intelligent Data Analytics, and Augmented Description: A Demonstration Project, *The Library of Congress Machine Learning + Libraries Summit*, September 20, 2019, Washington, D.C.
- T3. Soh, L.-K. (2019). Computational Thinking and Us, *NCPA Summer Camp*, July 11, 2019, Lincoln, NE
- T4. Lorang, E., and L.-K. Soh (2019). Detecting Poems and Its Implications. *DH Afternoons*, April 10, 2019, Lincoln, NE
- T5. Williamson, M. J. (Keynote Speaker), W. Babchuk, De. Minter, and L.-K. Soh (Collaborators). (2019). Celebrating the “P” in Impact and Innovative Instruction: Connecting Who We Are to What We Believe Students Should Be Learning in Our Classrooms (and hosting of one breakout session on higher order thinking skills), *UNL Spring Teaching and Learning Symposium*, February 22, 2019, Lincoln, NE.
- T6. Lorang, E., L.-K. Soh, Y. Liu, C. Pack, and D. Rahimi (2018). Using Chronicling America’s Images to Explore Historic Newspapers and Imagine Alternative Futures, *National Digital Newspaper Program Awardee Conference*, National Endowment for the Humanities, September 26-28, 2018, Washington, DC.
- T7. Lorang, E. and L.-K. Soh (2018). Keynote: Increasing Our Vision for 21st-Century Digital Libraries, *HathiTrust Research Center (HTRC) UnCamp Conference*, January 25, 2018, Stanford, CA.
- T8. Soh, L.-K. (2018). Understanding Interviewer and Respondent Behaviors in a CATI, Web-Based ATUS Instrument, *Summer at Census*, Center for Statistical Research and Methodology Seminar, Research and Methodology Directorate, Suitland, MD, September 10, 2018.
- T9. Soh, L.-K. (2018). Computational Creativity Exercises for Improving Student Learning and Performance, One-hour Tutorial, *Annual Computer Science Teachers Association (CSTA) Conference (CSTA’2018)*, Omaha, NE, July 10, 2018.
- T10. Miller, L. D., and L.-K. Soh (2017). Automatic Evaluation of Unstructured Text in Essay-Style Questions Using IBM’S Watson API, DBER Group’s STEM Education Seminar, University of Nebraska, Lincoln, NE, October 5, 2017.
- T11. Soh, L.-K. (2017). Investigating Differences in Wiki-Based Collaborative Activities between Student Engagement Profiles in Computer Science Education, DBER Group’s STEM Education Seminar, University of Nebraska, Lincoln, NE, September 14, 2017. *Note: Same presentation presented at SIGCSE’2016 by Adam Eck for a paper authored by Eck, A., L.-K. Soh, and D. Shell.*
- T12. Soh, L.-K. (2017). Investigating Differences in Wiki-Based Collaborative Activities between Student Engagement Profiles in CS1, *UNL STEM Ed Seminar*, September 14, 2017.
- T13. Soh, L.-K. (2017). May Computational Thinking be with You, Girl Scouts Code Camp: Tap into your Appotential, Lincoln, NE, June 26, 2017.
- T14. Soh, L.-K. (2017). Computational Thinking and CS Unplugged, Adventures in Alice Summer Workshop, Lincoln, NE, June 7, 2017.
- T15. D. F. Shell and L.-K. Soh (2016). Student Motivation and Strategic Engagement: What Do They Mean for Student Learning and Classroom Instruction, *Fall 2016 Teaching and Learning Symposium*, Nebraska Innovation Campus, University of Nebraska, Lincoln, NE, October 7, 2016.

- T16. Soh, L.-K. (2016). Computational Thinking, Computer Science, Informatics, and Chutes and Ladders, CSCE100, University of Nebraska, Lincoln, NE, September 20, 2016.
- T17. Soh, L.-K. (2016). Computational Thinking, Adventures in Alice Summer Workshop, Lincoln, NE, July 19, 2016.
- T18. Soh, L.-K. (2016). Computational Thinking, Computer Science, and Computer Programming (... and other matters), Girl Scouts Code Camp: Tap into your Appotential, Lincoln, NE, June 27, 2016.
- T19. Soh, L.-K. (2016). Computer Science Unplugged - Activities for Any Class, Anywhere, at Nebraska Educational Technology Association (NETA) conference 2016, April 22, 2016, Omaha, NE.
- T20. Shell, D.F. and L.-K. Soh (2016). Practical Implications Related to Motivation and Engagement, Spring Teaching & Learning Symposium 2016, University of Nebraska, Lincoln, NE, April 1, 2016.
- T21. Shell, D. F. and L.-K. Soh (2015). Understanding Student Motivation and Strategic Engagement in Computer Science and STEM Courses, DBER Group's STEM Education Seminar, University of Nebraska, Lincoln, NE, October 29, 2015
- T22. Soh, L.-K. and D. F. Shell (2015). Integrating Computational Creativity Exercises into Classes, DBER Group's STEM Education Seminar, University of Nebraska, Lincoln, NE, September 3, 2015
- T23. Soh, L.-K. (2015). Computational Thinking, Computer Science, Informatics, and Chutes and Ladders, CSCE100, University of Nebraska, Lincoln, NE, September 24, 2015.
- T24. Soh, L.-K. (2015). Computational Thinking and Computer Science, CSCE10, University of Nebraska, Lincoln, NE, September 16-17, 2015
- T25. Soh, L.-K. (2015). Computational Thinking, Computer Science, and Computer Programming (... and other matters), Girl Scouts Code Camp: Tap into your Appotential, Lincoln, NE, June 17, 2015.
- T26. Lorang, E. and L.-K. Soh (2014). Leveraging Visual Information for Discovery and Analysis of Digital Collections, Digital Library Federation Forum (DLFF 2014), Atlanta, GA, October 27-29, 2014. (20%)
- T27. Atkin, G., H. Arunachalam, A. Eck, L.-K. Soh, and R. F. Belli (2014). Designing an Intelligent Time Diary Instrument: Visualization, Dynamic Feedback, and Error Prevention and Mitigation, UNL/SRAM/Gallup Symposium 2014, April 11, 2014. (5%)
- T28. Eck, A., L. Stuart, G. Atkin, L.-K. Soh, A. L. McCutcheon, and R. F. Belli (2014). Making Sense of Paradata: Challenges Faced and Lessons Learned, UNL/SRAM/Gallup Symposium 2014, April 11, 2014. (10%)
- T29. Eck, A. and L.-K. Soh (2014). Survey Informatics: Ideas, Opportunities, and Discussions, UNL/SRAM/Gallup Symposium 2014, April 11, 2014. (50%)
- T30. Soh, L.-K. (2014). Informatics Minor, University of Nebraska-Lincoln Curriculum Retreat, April 11, 2014.
- T31. Soh, L.-K. and A. Eck (2014). Survey Informatics: Ideas, Opportunities, and Discussions, NSF-Census Research Networks (NCRN) Web Seminar, April 2, 2014. (50%)
- T32. Lorang, E., L.-K. Soh, J. Lunde, and G. Thomas\* (2014). *Detecting Poetic Content in Historic Newspapers with Image Analysis*, Center for Research in Digital Humanities, April 1, 2014. (20%)
- T33. Soh, L.-K. and A. Eck (2014). Survey Informatics: Ideas, Opportunities, and Discussions, Gallup, Omaha, NE, March 13, 2014. (50%)
- T34. Soh, L.-K. (2012). Multiagent Systems: A Distributed, Bottom-up Approach to Solving Complex Problems, Information Technology Focus Group, Lincoln Public Schools, as part of the nationwide Computer Science Education week (CSEd), December 11, 20112.
- T35. Soh, L.-K. (2012). UNL Renaissance Computing, Nebraska Tapestry Workshop, Lincoln, NE, July 24, 2012.
- T36. Soh, L.-K. (2011). Evaluating and Revising Learning Objects in CS1, Department of Computer Science and Engineering Seminar, University of North Texas, Denton, TX, March 11, 2011.
- T37. Soh, L.-K. (2010). Renaissance Computing: An Initiative for Promoting Student Participation in Computing, Stony Brook University, Stony Brook, NY, March 2, 2010.

- T38. Soh, L.-K. (2010). Renaissance Computing: An Initiative for Promoting Student Participation in Computing, Hofstra University, Long Island, March 3, 2010.
- T39. Soh, L.-K. (2010). Renaissance Computing: An Initiative for Promoting Student Participation in Computing, University of Massachusetts-Lowell, Lowell, MA, February 23, 2010.
- T40. Soh, L.-K. and N. Khandaker (2008). Multiagent Systems: Local Decisions vs. Global Coherence, Department of Mathematics, University of Nebraska, Lincoln, NE, February 11, 2008. (65%)
- T41. Soh, L.-K. and A. Samal (2006). Computing Quality of Data for Streamflow Analysis, *2006 Water Colloquium*, University of Nebraska, Lincoln, NE, October 27, 2006. (50%)
- T42. Soh, L.-K. (2006). Agents and Computer-Aided Education Systems, Lincoln Public Schools Workshop, University of Nebraska, Lincoln, NE, July 26.
- T43. Soh, L.-K. (2005). ILMDA: An Intelligent Agent that Learns to Deliver Learning Materials, Education and Technology Research Forum, University of Nebraska, Lincoln, NE, March 21.
- T44. Soh, L.-K. (2004). Intelligent Agents to Deliver Learning Materials, *Future Problem Solving Workshop-Hastings*, Nebraska, January 21.
- T45. Soh, L.-K. (2003). Developing Intelligent Agents and Multiagent Systems for Educational Applications, Technology in the Classroom, Instructional Technology Advisory Committee (ITAC), November 13, 2003.
- T46. Soh, L.-K. (2003). Agents and Multiagent Systems in Education, Education and Technology Research Forum, University of Nebraska, Lincoln, NE, February 24.
- T47. Soh, L.-K. (2002). ARKTOS: A Knowledge-Based Expert System for Sea Ice Classification, National Soil Survey Center, Lincoln, NE, December 2 2002.
- T48. Soh, L.-K. (2002). IT in Education: Technology Focus, Business-Higher Education Forum Committee on Technology and Learning, J. D. Edwards Program, University of Nebraska, Lincoln, NE, October 2002.
- T49. Soh, L.-K. (2001). Multiagent Case-Based Reflective Negotiation, Fall 2001 Colloquium Series, Computer Science and Engineering, University of Nebraska, Lincoln, NE, October 4.

### **Panels**

- PL1. Panelist, the National Science Foundation Principal Investigator Panel, ASEE'2018 Interactive Workshop on Crafting a Competitive NSF STEM Education Proposal, organized by Abby Ilumoka, June 24, 2018, Salt Lake City, UT.
- PL2. Author of a Panel Abstract "At the Nexus of Data and Collections: New Affordances in the Age of Mass-Scale Digital Libraries", J. S. Downie, E. Lorang, L.-K. Soh, D. Bainbridge, S. McIntyre, and K. Page, for Joint Conference on Digital Libraries (JCDL 2018), June 3-6, 2018, Fort Worth, TX., 2p. (Was not able to attend the panel).
- PL3. Panelist on the SIGCSE'2017 Special Session, March 10, 2017, Seattle, WA: "ICER UP CS Ed Research Workshop Summary – Essence of Illustrative Projects." Moderators: Eileen Kraemer, Aubrey Lawson, and Murali Sitaraman.
- PL4. Panelist on the Teaching & Learning Improvement Committee's Peer Review in Teaching Panel, Department of Computer Science and Engineering, University of Nebraska, Lincoln, NE, October 3, 2017

### **Technical Reports**

- TR1 Foruzan, E. and L.-K. Soh (2017). Distributed Energy Management in a Microgrid: A Multiagent Reinforcement Learning Approach, *Technical Report TR-UNL-CSE-2017-0002*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (35%)
- Wettlaufer, D. and L.-K. Soh (2015). Mixed Human-Agent Teams for Human Learning, *Technical Report TR-UNL-CSE-2015-0001*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (35%)
- TR2 Chiriacescu, V., L.-K. Soh, and D. Shell (2014). A Comparative Analysis of the Computational Unified Learning Model (C-ULM) Framework with Knowledge Computing and Reasoning, *Technical Report TR-UNL-CSE-2014-0002*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (5%)

- TR3 Eck, A. and L.-K. Soh (2013). Non-Stationary Phenomenon in Large Team Information Sharing, *Technical Report TR-UNL-CSE-2013-0001*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (15%)
- TR4 Miller, L.D. and L.-K. Soh (2012). Finding the Boundary of Use to Improve Repair Mechanisms for Supervised Learning Systems, *Technical Report TR-UNL-CSE-2012-0003*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (15%)
- TR5 Joshi, D., L.-K. Soh, A. Samal, and J. Zhang (2011). A Dissimilarity Function for Geospatial Polygons, *Technical Report TR-UNL-CSE-2011-0010*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (10%)
- TR6 Eck, A. and L.-K. Soh (2009). Intelligent User Interfaces with Adaptive Knowledge Assistants, *Technical Report TR-UNL-CSE-2009-2011*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (10%)
- TR7 Eck, A. and L.-K. Soh (2009). Agent Sensing in Limited Resource Environments, *Technical Report TR-UNL-CSE-2009-2005*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (15%)
- TR8 Khandaker, N. and L.-K. Soh (2009). A Multiagent Framework for Human Coalition Formation, *Technical Report TR-UNL-CSE-2009-2003*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (25%)
- TR9 Khandaker, N. and L.-K. Soh (2009). Multiagent Simulation of Collaboration and Scaffolding of a CSCL Environment, *Technical Report TR-UNL-CSE-2009-2002*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (35%)
- TR10 Khandaker, N. and L.-K. Soh (2008). On Incorporating Learning Theories to Simulate a Computer-Supported Collaborative Learning Environment, *Technical Report TR-UNL-CSE-2008-0006*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (5%)
- TR11 Eck, A., L. D. Miller, L.-K. Soh, H. Jiang, and T. Chou (2007). ConferenceXP-Powered I-MINDS: A Multiagent System for Intelligently Supporting Online Collaboration, *Technical Report TR-UNL-CSE-2007-0014*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (15%)
- TR12 Rupiper†, J., X.-H. Chen, L.-K. Soh, and A. Samal (2006). Spatial Distribution of Quaternary Sediments in Nebraska, School of Natural Resources Open-file Report SKU OPR-76, University of Nebraska-Lincoln. (5%)
- TR13 Liu, X., H. Jiang, and L. K. Soh (2005). DCDP: A Novel Data-Centric and Design-Pattern Based Approach to Automatic Loop Transformation and Parallelization for A Shared-Object Environment in Clusters, *Technical Report TR-UNL-CSE-2005-0009*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (5%)
- TR14 Li, X. and L.-K. Soh (2004). Applications of Decision and Utility Theory in Multi-Agent Systems, *TR-UNL-CSE-2004-0014*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (10%)
- TR15 Moss, E. and L.-K. Soh (2004). An Adaptive Mechanism for Improving File Transfer Performance, *TR-UNL-CSE-2004-0012*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (5%)
- TR16 Kite, J. and L.-K. Soh (2004). An Online Survey Framework Using the Life Events Calendar, *TR-UNL-CSE-2004-0011*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (10%)
- TR17 Soh, L.-K. (2004). Cooperative Learning Teams for Multiagent Team Formation, *TR-UNL-CSE-2004-0006*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR18 Soh, L.-K., L. D. Miller, T. Blank, and S. Person (2004). ILMDA: Intelligent Learning Materials Delivery Agent, *TR-UNL-CSE-2004-0005*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (45%)
- TR19 Glasser, J. A. and L.-K. Soh (2004). AI in Computer Games: From Player's Goal to AI's Role, *TR-UNL-CSE-2004-000*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (20%)

- TR20 L.-K. Soh (2003). Reasoning and Learning with Imperfect Casebases: An Agent Perspective and An Expert Model, *TR-UNL-CSE-2004-0002*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR21 Soh, L.-K. (2003). Teaching a Multiagent Systems Class with Game Days: Designs and Lessons Learned, *TR-UNL-CSE-2003-9*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR22 Soh, L.-K. and J. J. Bernadt\* (2003). Authoritative Citation KNN Learning with Noisy Training Datasets, *TR-UNL-CSE-2003-3*, Department of Computer Science and Engineering, University of Nebraska-Lincoln. (65%)
- TR23 Soh, L.-K. (2002). Some New Sea Ice Feature Descriptors and Their Algorithms for SAR Images, *TR-UNL-CSE-2002-4*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR24 Soh, L.-K. (2002). Two Algorithms for Shape-Based Porosity Measures, *TR-UNL-CSE-2002-3*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR25 Soh, L.-K. (2002). A Negotiation-Based Coalition Formation Model for Agents with Incomplete Information and Time Constraints, *TR-UNL-CSE-2002-2*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR26 Soh, L.-K. (2002). ARKTOS: An Intelligent System for Satellite Sea Ice Image Analysis, *TR-UNL-CSE-2002-1*, Department of Computer Science and Engineering, University of Nebraska-Lincoln.
- TR27 Soh, L.-K. (2001). Literature Review on Real-Time AI Systems, *ITTC-FY2001-TR-19860-04*, Information Technology and Telecommunications Center, University of Kansas.
- TR28 Soh, L.-K. (2000). Literature Review on Mobile, Active, and Smart Data in Telecommunication Networks, *ITTC-FY2001-TR-19860-03*, Information Technology and Telecommunications Center, University of Kansas.
- TR29 Soh, L.-K. (2000). Literature Review on Agent-Based Negotiations, *ITTC-FY2001-TR-19860-02*, Information Technology and Telecommunications Center, University of Kansas.
- TR30 Soh, L.-K. (2000). Combining Genetic Algorithms and Case-Based Reasoning for Genetic Learning of a Case Library: A Conceptual Framework, *ITTC-FY2001-TR-19860-01*, Information Technology and Telecommunications Center, University of Kansas.
- TR31 Soh, L.-K. and C. Tsatsoulis (1999). Experiments and Algorithmic Analysis of the Restricted Growing Concept, *ITTC-FY99-11810-05*, Information Technology and Telecommunications Center, University of Kansas. (90%)
- TR32 Soh, L.-K. (1998). A General Model for Designing Unsupervised Segmentation Techniques in Image Analysis, *ITTC-FY98-TR-11810-04*, Information Technology and Telecommunications Center, University of Kansas.
- TR33 Soh, L.-K. and C. Tsatsoulis (1998). Automated Multiyear Ice Extraction Using Multiresolution Tracking and Binary Clustering, *ITTC-FY98-TR-11810-03*, Information Technology and Telecommunications Center, University of Kansas. (90%)
- TR34 Soh, L.-K. and C. Tsatsoulis (1998). The Restricted Growing Concept for Object Separation, *ITTC-FY98-TR-11810-02*, Information Technology and Telecommunications Center, University of Kansas. (90%)
- TR35 Soh, L.-K. and C. Tsatsoulis (1997). Automated Sea Ice Segmentation Using Spatial Clustering, *ITTC-FY98-TR-11810-01*, Information Technology and Telecommunications Center, University of Kansas. (90%)
- TR36 Soh, L.-K. and C. Tsatsoulis (1993). A Multistage Feature Extraction Technique for Synthetic Aperture Radar (SAR) Sea Ice Imagery, Part I: Combination of Algorithmic and Heuristic Methods, *CECASE TR 9710-02*, Information Technology and Telecommunications Center, University of Kansas. (85%)
- TR37 Soh, L.-K. and C. Tsatsoulis (1993). A Multistage Feature Extraction Technique for Synthetic Aperture Radar (SAR) Sea Ice Imagery, Part II: The Restricted Growing Concept, *CECASE TR 9710-03*, Information Technology and Telecommunications Center, University of Kansas.

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## TEACHING

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## A. COURSES TAUGHT

*Notes: I have offered 100-level courses<sup>1</sup> 15 times with an average of 4.15 (average enrollments = 41.4, maximum enrollments = 94), 200-level courses 6 times with an average of 4.31 (average enrollments = 42.7, maximum enrollments = 83), 400/800-level courses 14 times with an average of 4.38 (average enrollments = 14.1, maximum enrollments = 29) and 900-level courses 2 times with an average of 4.53 (average enrollments = 6.5, maximum enrollments = 8). The department averages, since Spring 2007, are 3.44 for 100-level courses, 4.06 for 200-level courses, 4.39 for 400/800-level courses, and 4.72 for 900-level courses.*

- 1 CSCE 155N Introduction to Computer Science I (Matlab) (Fall 2012, Spring 2013, Fall 2016)
- 2 JDEP 183H Computer Problem Solving Essentials (Fall 2006, Fall 2008, Fall 2009, Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2014) (now known as RAIK183H)
- 3 CSCE 155 Introduction to Computer Science I (Fall 2004, Spring 2005, Fall 2005)
- 4 CSCE 155H Introduction to Computer Science I: Honors (Fall 2004, Spring 2005, Fall 2005)
- 5 CSCE 156 Introduction to Computer Science II (Spring 2007)
- 6 CSCE 235 Introduction to Discrete Structures (Spring 2002, Spring 2003, Spring 2004, Fall 2006, Spring 2008, Spring 2009)
- 7 CSCE/RAIK 390 Artificial Intelligence Applications (Spring 2011)
- 8 CSCE 410/810 Information Retrieval Systems (Fall 2001, Fall 2003, Spring 2006, Spring 2008)
- 9 CSCE 496H/896 Artificial Intelligence and Applications (Fall 2008)
- 10 CSCE 475/875 Multiagent Systems (Fall 2002, Fall 2003, Spring 2006, Fall 2007, Fall 2009, Fall 2011, Fall 2013, Spring 2015, Fall 2016, Spring 2016)
- 11 CSCE 487 Computer Science Professional Development (Spring 2009)
- 12 CSCE 399H Honors Thesis
  - a. Multiagent Learning of User Behavior (Fall 2007) (Kyle Dobitz)
  - b. Intelligent Learning Object Guide (Fall 2007) (Sarah Reiter)
  - c. Adaptive Repairs for an Intelligent Tutoring System (Fall 2007) (Keith Nickum)
  - d. Resource Aware Multiagent Support for Online Collaboration. (May 2008) (Adam Eck)
- 13 CSCE 891 Internship in Computer Practice
  - a. (Fall 2003) (Ashok Thirunavukarras)
  - b. (Summer 2015) (Anish Timisina)
- 14 CSCE 990 Advanced Multiagent Systems (Spring 2011, Spring 2013, Fall 2016)
- 15 Arranged Courses (CSCE 996, CSCE991, CSCE898, CSCE498, CSCE399, etc.)
  - a. Decision and Utility Theories in Various Aspects of Multiagent Systems (Fall 2001) (Xin Li)
  - b. I-CHOIR: Imagery Collaborative Hierarchical Ontology for Indexing and Retrieval (Spring 2004) (Chao Chen)
  - c. Building an Intelligent Online Survey Assistant (Spring 2004) (Jared Kite)
  - d. Adaptive File Transfer (Spring 2004) (Eric Moss)
  - e. Building an Intelligent Agent to Play Poker (Fall 2004) (Todd Blank)
  - f. Question Ranking, Classification, & Grouping for I-MINDS (Summer 2004) (Nobel Khandaker)
  - g. Data Mining ILMDA Application Results (Spring 2005) (L.D. Miller)
  - h. Spatial Data Mining (Fall 2006) (Tao Hong)
  - i. Coalition Formation in Games (Fall 2006) (Nobel Khandaker)

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<sup>1</sup> 100-level courses: freshmen courses, 200-level: sophomore; 400/800-level: senior and graduate; 900-level: advanced graduate

- j. Spatial Data Mining (Summer 2007) (Deepti Joshi)
- k. Self-Configuring Intelligent Systems in Education (Fall 2007) (L.D. Miller)
- l. Strategic and Tactical Multiagent Coalition Formation (Spring 2009) (Adam Eck)
- m. Challenges Surrounding Volunteered Geographic Information (VGI) (Fall 2010) (Puthavika Phon)
- n. A Survey of Recommender Systems (Spring 2012) (Rubenia Borge)
- o. Data Analysis of Long Term Learning Objects Deployment (Spring 2012) (Istiaque Ali)
- p. Understanding Ad Hoc Multiagent Team Formation (Fall 2013) (Bin Chen)
- q. Supporting Ad Hoc Multiagent Team Formation (Spring 2014) (Xi Chen)
- r. Integration of Agent-Based Systems and Boolean Networks (Spring 2014) (Bryan Kowal)
- s. Considering Openness and Learning in Multiagent Team Formation (Fall 2014) (Anish Timsina)
- t. Soliciting and Managing Metadata for Spectral Images (Spring 2015) (Shilpa Khanal)
- u. Investigating Patterns and Factors in Survey Data Towards Intelligent Automation (Summer 2017) (Pooja Ahuja)
- v. Instrumenting Online Learning Platform to Model Student Behaviors (Fall 2017) (Robert Lafferty)
- w. A Survey of Computer-Mediated Adaptive Survey and Interview Instrument (Fall 2018) (Nancy Pham)
- x. Intelligent Data-Driven Analysis for Understanding and Predicting Social Unrest Dynamics (Fall 2018) (Sudeep Basnet)
- y. Analyzing Archived Historical Newspaper Collections via Data-Driven Modeling and Image Processing (Fall 2018) (Chulwoo Pack)
- z. Intelligent Image Analysis for Automatically Detecting Poems in Old, Digitized Newspapers (Fall 2018) (Yi Liu)
- aa. Statistical Analysis of Image Qualities of Historically Archived Newspaper Pages (Fall 2018) (Yi Liu)
- bb. Investigating Diversity in Open Ad Hoc Teamwork Environment with Human Learning (Fall 2018) (Yi Xia)
- cc. CSCE991: Analyzing Archived Historical Newspaper Collections via Data-Driven Modeling and Image Processing (Fall 2018) (Chulwoo Pack)
- dd. CSCE899: Intelligent Data-Driven Analysis for Understanding and Predicting Social Unrest Dynamics (Fall 2018) (Sudeep Basnet)
- ee. CSCE996: Investigating the Use and Modeling of Human Learning in Agent-Based Systems (Spring 2019) (Yi Xia)
- ff. CSCE399H: Investigating Creative Coding Instruction for Learning Computational Thinking (Summer 2019) (Dana Hoppe)
- gg. CSCE996: A Literature Review on Teaching Teachers to Teach Computer Science (Fall 2019) (Patrick Morrow)
- hh. CSCE996: Multiagent Modeling of Social Unrest Events and Their Evolution (Fall 2019) (Anup Adhikari)

## **B. CURRICULAR DEVELOPMENT**

### **CSCE 410/810 Introduction to Information Retrieval**

Fall 2001

Revamped all aspects of the class: course materials, subject topics, projects, presentations, reading lists, computer programming homework assignments. Reorganized the syllabus. Completely re-designed this class. Introduced several important, basic topics in Information Retrieval and designed four programming assignments, including an application-driven final project. Collected a library of journal and conference papers in Information Retrieval as a supplement to this class. Collected several software modules and databases specific for information retrieval.

- CSCE 235 Introduction to Discrete Structures** Spring 2002  
Introduced Lightbulbs—interesting, real-world examples based on discrete structures—to class.
- CSCE 496/896 Special Topics – Multiagent Systems** Fall 2002  
Introduced a brand new class. Developed the class as an Integrative Studies (IS)-designated class as well (approved). Created Game Days and the Fox-and-Hounds pursuit game (wrote and built a simulation and visualization software called FOREST1.0). Incorporated team-based and game-based learning protocols. Created the Stupid Question series.
- CSCE 235 Introduction to Discrete Structures** Spring 2003  
Co-revised the syllabus for CSCE235 and co-wrote a new course specification. Introduced programming assignments. Designed a “learning-through-teaching” programming assignment where students designed web-based learning objects for a particular topic that includes a tutorial, a set of examples, and a set of interactive problems. Started a digital library of these learning objects.
- CSCE 410/810 Introduction to Information Retrieval** Fall 2003  
Introduced 4-5 advanced topics. Invited and arranged for a special Forum, with the speaker Dr. Mehran Sahami from Google and Stanford University, for the class.
- CSCE 475/896 Multiagent Systems** Fall 2003  
Continued with Game Days and the Fox-and-Hounds pursuit game (with a new improved FOREST1.1 software package). Continued with the Stupid Question series. Expanded a collection of readings.
- CSCE 155 Introduction to Computer Science I** Fall 2004  
Created new handouts and homework assignments. Collected and maintained programming recourses (tips, tutorials, hints, etc.) online. Created a set of Do-It-Yourself assignments. Created a series of history of computing lectures.
- CSCE 155 Introduction to Computer Science I** Spring 2005  
Created new homework assignments and “test” programs. Test programs are small programs that students can experiment with without having to be concerned with too much program syntax – allowing them to better understand some key concepts covered in the course.
- CSCE 487 Computer Science Design Project** Spring 2005  
Co-wrote the course specification for this new course, to be a required course for computer science majors before they graduate.
- CSCE 155 Introduction to Computer Science I** Fall 2005  
Created new homework assignments, new test programs (this time I posted them as well), a suite of Personal Response Systems (PRS) just-in-time quizzes online, and conducted a series of in-class forums (e.g., Disaster Relief System, Smart Home Systems, Acting Out Sorting Algorithms, etc.). For each forum, I used the entire lecture to conduct group activities—dividing the classroom into groups with assigned tasks that require conceptual solutions, and discussing the solutions in class. I then wrote an analysis of each forum and handed it out to the students in the next lecture.
- Project Re-Inventing CS Curriculum** Summer 2003 – 2005  
Joined the project in June 2003 to introduce laboratories to CS0, CS1 and CS2, and help design and implement a placement examination, learning objects, and other relevant logistics for these courses. This was a very significant overhauling of introductory CS courses as we incorporate educational research, instructional design, traditional laboratories, and technology-based tools to help students learn as well as to investigate how they learn and how well they learn.
- JDEP 183H Computer Problem Solving Essentials** Fall 2006  
Co-developed business-related homework programming assignments, integrating applications in accounting and finance.
- CSCE496H/896 Artificial Intelligence and Applications** Fall 2008  
Developed a new course for Artificial Intelligence (AI) fundamentals with focus in applications.
- CSCE487 Computer Science Professional Development** Spring 2009  
Revised the course with interdisciplinary projects with faculty at Digital Humanities.

**CSCE/RAIK390 Special Topics: Artificial Intelligence Applications** Spring 2011  
Developed a new course for Artificial Intelligence Applications, targeting students from the Raikes school. Used a new textbook and prepared entire new set of lecture notes.

**CSCE 475/875 Multiagent Systems** Fall 2011, Fall 2013  
Developed brand new game days. Designed new Wiki assignments. Used a new textbook. Prepared entire set of new lecture notes.

**CSCE 155N Introduction to Computer Science I Matlab** Fall 2012  
Created new homework assignments and final project, prepared a brand new set of lecture notes, new test programs (this time I posted them as well).

**CSCE 155N Introduction to Computer Science I Matlab (Online)** Spring 2014  
Designed a suite of online materials (lectures and examples), with Ryan Patrick. We created more than 100 videos for the course. I personally recorded more than 90 videos on examples of CS concepts and Matlab programs. The materials are now being used as supplements to in-class CSCSE155N to evaluate their readiness.

**CSCE 100 Introduction to Informatics** Fall 2018  
Revised the course, with assignments in Python, dealing with MySQL databases.

**CSCE 975 Advanced Multiagent Systems** Fall 2018  
Formerly a CSCE990 special topics course for graduate students, the course was made official in Spring 2019. Developed a set of talks in fundamental topics of multiagent systems; and typically includes additional talks each semester on the most recent topics in multiagent systems.

### C. PEDAGOGICAL ACTIVITIES

**Project Reinventing CS Curriculum** 2001-2005  
Overhauled the introductory CS curriculum at UNL, designing and deploying a placement exam, designing and deploying a suite of CS0, CS1, and CS2 structured labs, conducting educational research studies on cooperative learning in the labs.

**Instructional Technology and Internet-Based Education (IT-IBE) Faculty Group**  
**University of Nebraska, Lincoln, NE** 2001-2007  
A faculty member of the Instructional Technology and Internet-Based Education Faculty Group, a multi-disciplinary group comprising professors from the Teachers College and Department of Computer Science and Engineering. The group's goal is to bring Information Technology into the classrooms and how to do it to benefit both teachers and students in terms of pedagogy, curriculum, and management.

- Evaluating Instructional Technology program
- Evaluating Internet-Based Education program
- Helping design and evaluating on-line instructional survey
- Participating in discussions in instructional technology

**Education and Technology Research Forums** Fall 2002 – 2007  
Participated in the various forums on education research and the use of technology in classrooms. Gave a talk on using agent-based software to help teachers teach and help students learn.

**Technology in the Classroom, Instructional Technology Advisory Committee (ITAC),**  
**University of Nebraska, Lincoln, NE** November 13, 2003  
Participated in the meeting and presented a paper on using agent-based software for designing educational applications and instructional methodology.

**SIGCSE Subcommittee on Discrete Mathematics** Spring 2003 – Fall 2003  
**SIGCSE Committee on the Implementation of A One-Semester Discrete Math Course** Fall 2006  
I was a committee member the nation-wide Special Interest Group on Computer Science Education (SIGCSE) subcommittee on curriculum design and course development for Discrete Mathematics for CS majors. Participating in online discussions (particularly, on how to teach discrete structures for CS and Math majors; on a 1-semester vs. 2-semester course design) and surveys and research.  
Report: Marion, B. and D. Baldwin (2007). On the Implementation of a Discrete Mathematics Course, *The SIGCSE Bulletin*, 39(2):109-126.

**Peer Review in Teaching Program** Fall 2003 – Spring 2004

I joined the year-long program in August 2003 after submitting a proposal in Spring 2003. Participating in designing better course materials, evaluating course objectives and assessing student performances. I learned how to create benchmark course portfolios that represented the goals and practices for a particular course. This program was organized by Paul Savory, Amy Goodburn, and Amy Burnett.

**Advanced Peer Review in Teaching Program** Fall 2004 – Spring 2005

I joined the year-long program in August 2004 to continue reflecting upon and documenting my teaching within a community of colleagues. Participating in designing inquiries, evaluating course portfolios of others. I learned how to create inquiry portfolios focused around a specific question or issue regarding teaching practices, course structures, and student learning over time. This program was organized by Paul Savory, Amy Goodburn, and Amy Burnett.

**ITiCSE Working Group on Concept Inventory for Discrete Mathematics** Spring 2006

Participated in discussions on concepts, misconceptions, and pedagogy in general in teaching CS topics, and developed a guideline for creating concept inventories, in particular.

**Project Renaissance Computing** January 2008 – 2012

Started discussions on Renaissance Computing, an initiative to broaden the impact of computer science education to other disciplines through innovative course design and curriculum; received an NSF concept development and planning grant; involved in the designing of CS1-Arts, CS1-Humanities, CS1-Sciences, and CS1-Engineering and the education study.

**Birds-of-A-Feather at SIGCSE'2011** March 2011

with Dr. Jesse Heines of U. Massachusetts-Lowell on **Assessing Interdisciplinary CS Initiatives**  
Discussed and shared experience in assessing CS initiatives intended for broader STEM and non-STEM education at different colleges; discussed issues and challenges, successes and moderators for unexpected results; further discussions are expected.

**IC2Think** 2012 – present

A project to integrate computational thinking and creative thinking to improve student learning and performance in CS1; supported by NSF TUES; creating a suite of exercises and lesson modules; distributed on Ensemble and Google's Exploring Computational Thinking.

**Tapestry Workshop** Summer 2012

Organized a Tapestry Workshop (with Dr. Chuck Riedesel) at the university with speakers and participants from around the country; discussed pedagogies, curricular materials, and community outreach for CS education; workshop was sponsored by NSF through University of Virginia.

**Informatics Minor** December 2012 – present

Led a multi-disciplinary group of UNL faculty (English, Music, Arts and Art History, History, Computer Science & Engineering, Education Psychology, Journalism, etc.) to design an Informatics minor program, designing advising structure, addressing issues from different departments and colleges, designing new courses, surveying course designs on informatics.

**Computer Science Teachers Association (CSTA) NE Huskers Chapter** 2013 – present

Co-founded the first CSTA local chapter in the state of Nebraska; working with high school teachers to affect changes to improve CS education in the state; participating in the annual CS Education Week.

**Booming Enrollment Focus Group (BEFG)** 2015 – 2016

Member of the Booming Enrollment Focus Group, led by Tracy Camp (Colorado School of Mines). Group's goals are to measure and understand impacts of booming enrollment at computing departments in the US, on how departments cope with booming enrollments, and on student profiles of these large enrollments.

**Featured Course Profile or Materials**

- 1 Soh, L.-K., E. Ingraham, and L. D. Miller (2018). Computational Creativity Exercise (CCE): Storytelling, *Engagement Excellence Subcollection*, recognized as one of the best submitted to the collection of NCWIT EngageCSEdu academic year 2017-2018.

- 2 Soh, L.-K. (2006). 2004 Course Portfolio for CSCE235: Introduction to Discrete Structures. Highlighted in *Making Teaching and Learning Visible: Course Portfolios and The Peer Review of Teaching*, by D. Bernstein, A. N. Burnett, A. Goodburn, and P. Savory, pp. 45-86, Boston: Anker Publishing.

#### D. UNDERGRADUATE STUDENT MENTORING

*Notes: I have worked with twenty-two (22) undergraduate students in total and received 33 UCARE awards from UNL. I have also worked with two NSF REU undergraduates for my research projects. Five of my undergraduate advisees wrote and successfully defended their undergraduate senior thesis.*

- 1 UCARE Award “Authoritative Citation KNN Learning,” University of Nebraska, \$2,000, period of performance 8/02-5/03. (with student Joseph Bernadt)
  - **Joseph J. Bernadt**, B.S. Senior Thesis, CS (Advisor), 2002-2004, May 2004: *Authoritative Citation KNN Learning with Noisy Data Sets*
- 2 UCARE Award “Genetic Learning with Utility-Based Influences,” University of Nebraska, \$2,000, period of performance 8/02-5/03. (with student Feroz Patwa)
- 3 UCARE Award “Building a Data and Information Fusion Mechanism for GIS Data,” University of Nebraska, \$2,000, period of performance 11/03-5/04. (with student Preston Mesick)
  - **Preston Mesick**, 2004 U.S. Department of Homeland Security Scholarship Recipient
- 4 UCARE Award “Simulating a Blue Jay’s Behavior Using Image Processing and AI Capabilities,” University of Nebraska, \$2,000, period of performance 05/04-12/04 (with student Guanshan Yu)
- 5 UCARE Award “Simulating a Blue Jay’s Behavior Using Image Processing and AI Capabilities,” University of Nebraska, \$2,400, period of performance 05/05-12/05. (with student Guanshan Yu, second year).
  - **Guanshan Yu**, B.S. Senior Thesis, CS (Co-Advisor), 2003-2005, December 2005: *Virtual Bluejay – A Data Mining Approach*
- 6 UCARE Award “Intelligent Web-Based Interfaces for Accessing Teaching and Learning Data and Information,” University of Nebraska, \$2,000, period of performance 05/05-12/05. (with student Akira Endo).
- 7 UCARE Award “Intelligent Web-Based Interfaces for Accessing Teaching and Learning Data and Information,” University of Nebraska, \$2,400, period of performance 05/06-12/06. (with student Akira Endo, second year).
  - **Akira Endo**, B.S. Senior Thesis, CS (Advisor), 2005-2006, December 2006: *Distribution Fitting and Outlier Detection in the Intelligent Learning Material Delivery Agent*
- 8 UCARE Award “Intelligent Joint Evolution of Data and Information,” University of Nebraska, \$2,000, period of performance 05/05-12/05. (with student Joshua Rupiper).
- 9 UCARE Award “Intelligent Joint Evolution of Data and Information,” University of Nebraska, \$2,400, period of performance 05/06-12/06. (with student Joshua Rupiper, second year).
- 10 UCARE Award “Computer-Supported Cooperative Learning Using I-MINDS,” University of Nebraska, \$2,000, period of performance 05/06-12/06. (with student Adam Eck)
- 11 UCARE Award “Computer-Supported Cooperative Learning Using I-MINDS,” University of Nebraska, \$2,400, period of performance 05/07-12/07. (with student Adam Eck, second year)
- 12 UCARE Award, “A Framework to Federate Disparate Biological Databases”, University of Nebraska, \$1,000, period of performance 05/07-12/07. (with student Steve Mott)
- 13 UCARE Award, “Studying I-MINDS Using a Simulation”, University of Nebraska, \$1,000, period of performance 05/07-12/07. (with student Kyle Dobitz)
- 14 NSF REU Award, supplementing “Intelligent Joint Evolution of Data and Information: An Integrated Framework for Drought Monitoring and Mitigation Support” from the NSF ITR, for \$8,000, 07/15/03-12/31/03. (with student HuiNee Chin)

- **HuiNee Chin**, NSF REU Undergraduate, 2003, B.S. Senior Thesis, CS (Co-Advisor), November 2004: *Global Teleconnection Patterns and Their Impact on Local Hydrological Processes and Crop Yields*; ACM SIGCSE SRC 2005 Participant.
- 15 UCARE Award, “Authoring Templates for Intelligent Learning Object Guide (iLOG)” \$2,000, period of performance, 05/01/08-04/30/09 (with student Jesse Hostetler)
- 16 UCARE Award, “Application for Touch-Screen Zoo Game for Children” \$2,000, period of performance, 05/01/08-04/30/09 (with student Michael Gubbels)
- 17 UCARE Award, “A Framework to Federate Disparate Biological Databases”, University of Nebraska, \$2,000, period of performance, 05/01/08-04/30/09 (with student Steve Mott, second year)
- 18 UCARE Award, “A Framework for Content Authoring for Learning Objects”, University of Nebraska, \$2,000, period of performance, 05/01/08-04/30/09 (with student Jesse Hostetler)
- **Jesse Hostetler**, NSF REU Undergraduate, 2008., B. S. Senior Thesis, CS (Co-Advisor), April 2009: *The iLOG Flash Editor: A Software Tool for Creating Interactive Learning Activities in Flash*
- 19 UCARE Award, “Multiagent System iLOG Simulation”, University of Nebraska, \$2,000, period of performance, 05/01/19-04/30/10 (with student WayLoon Tan)
- 20 UCARE Award, “Intelligent Learning Object Guide”, University of Nebraska, \$2,000, period of performance, 05/01/10-04/30/11 (with student Nate Stender)
- 21 UCARE Award, “Multiagent System iLOG Simulation”, University of Nebraska, \$2,000, period of performance, 05/01/10-04/30/11 (with student WayLoon Tan, Second year)
- 22 UCARE Award, “Analyzing Interaction Data of Online Learning Objects”, University of Nebraska, \$2,000, period of performance, 05/01/12-04/30/13 (with student Sing Hwa Lee)
- 23 UCARE Award, “Computational Simulations for the Unified Learning Model”, University of Nebraska, \$1,000, period of performance, 05/01/12-04/30/13 (with student Max Rowe) (**withdrawn**)
- 24 UCARE Award, “Using Image Processing to Identify Poem Contents”, University of Nebraska, \$2,000, period of performance, 06/01/13-05/31/14 (with student Joe Lunde)
- 25 UCARE Award, “Image Analysis for Archival Discovery: Poetic Content in Historic Newspapers”, University of Nebraska, \$2,400, period of performance, 08/26/14-05/03/15 (with student Maanas Datla)
- 26 UCARE Award, “Survey Error Prevention: An Intelligent Agent Approach”, University of Nebraska, \$2,400, period of performance, 08/26/14-05/03/15 (with student Gregory Atkin)
- 27 UCARE Award, “Operationalizing Automatic Poem Identification in Archival Newspapers: Research Issues and Solution Engineering”, \$2,400, period of performance, 06/01/15-07/31/15 (with student Spencer Kulwick)
- 28 UCARE Award, “Operationalizing Automatic Poem Identification in Archival Newspapers: Research Issues and Solution Engineering”, \$2,400, period of performance, 06/01/15-07/31/15 (with student Maanas Datla)
- 29 Xi Chen, 2013 – 2015 (graduated with Honors in May 2015)
- 30 Kevin North, 2013 – 2014
- 31 UCARE Award, “The Impact of Diversity on Open Ad-Hoc Team Formation Environments in Multiagent Systems”, \$2,400, period of performance, 09/12/2016-04/07/2017 (with student Elliot Sandfort)
- 32 McNair Scholar Research, 02/01/2016-07/31/2016 (with student Elliot Sandfort)
- 33 UCARE Award, “Implementing the Computational Model of Unified Learning Model to Find Individual-Level and Group-Level Phenomena of Learning in Multi-Agent Systems”, \$2,400, period of performance, 09/12/2016-04/07/2017 (with student Johnathan Avery)
- 34 UCARE Award, “The Impact of Diversity on Open Ad-Hoc Team Formation Environments in Multiagent Systems”, \$2,400, period of performance, 09/12/2017-04/07/2018 (with student Elliot Sandfort)
- 35 Cale Harms, UCARE Award transferred to working with me, 09/01/2017-05/01/2018
- 36 McNair Scholar Research, 02/01/2018-07/31/2018 (with student Trevor Fellbaum)

- 37 UCARE Award, “Investigating and Modeling Openness in Human Collaboration through Multi-Agent Simulations”, \$2,400, period of performance, 09/12/2018-04/07/2019 (with student Trevor Fellbaum)  
Note: Research relationship ended in summer 2018.
- 38 UCARE Award, “Effectiveness of Creative Coding as a Platform for Interdisciplinary Education”, \$2,400, period of performance, summer 2019 (with student Dana Hoppe)
- 39 NEH/IMLS undergraduate research assistant, James Kyle Janvrin, B.S. Math (Advisor), 2019.
- 40 NGA-funded project, Danny Tran, B.S. CS (Advisor), 2018-2019.
- 41 NSF-funded project, Emma Hubka, B.S. SE (Advisor), 2018 – present
- 42 NGA-funded project, Jimmy Erickson, B.S. CS (Advisor), 2029 – present

#### **E. GRADUATE STUDENT MENTORING**

*Notes: I have graduated eight Ph.D. students (seven in Computer Science and one in Instructional Technology)—four of which as the main advisor, and four as the co-advisor—and thirty-two (32) M.S. in Computer Science students (as the main advisor or co-advisor). One of my Ph.D. students, Adam Eck, received the prestigious NSF Graduate Research Fellowship award for his research. The fellowship provided more than \$121,000 in funding over three years for Adam to do research in resource-aware multiagent sensing. Adam Eck also won the CSE Department Outstanding Ph.D. Student Award in 2015.*

#### **Awards Received by Mentored Graduate Students**

- 1 Ph.D. student **Adam Eck** received
  - a. **NSF Graduate Research Fellowship Grant, \$40,500 per year for three years (total: \$121,000+), 08/01/2009-07/31/2012.**
  - b. NSF GAANN Fellowship, \$28,790, Fall 2008-Summer 2009
  - c. AAMAS Student Travel Support Scholarship, 2013 & 2014
  - d. University of Nebraska “Franco’s List” for character and integrity, 2015
  - e. Outstanding Ph.D. Award, Department of Computer Science, University of Nebraska, 2015
- 2 Ph.D. student **Lee Dee (L.D.) Miller** received
  - a. Student Scholarship (\$525 One Time), 2011, awarded by the International Conference on Machine Learning (ICML’11)
  - b. NSF GAANN Fellowship, \$10,031, 2009
  - c. NSF GAANN Fellowship, \$13,555, 2008
- 3 Graduated Ph.D. student **Nobel Khandaker** received
  - a. Student Scholarship (\$1090.00 One Time), 2010, awarded by the International Conference on Autonomous Agents and Multiagent Systems (AAMAS’10)
  - b. Student Scholarship (\$500.00 One Time), 2007, awarded by the International Conference on Autonomous Agents and Multiagent Systems (AAMAS’07)
  - c. The Othmer Fellowship (\$11,000.00 per Year, for \$33,000 total), Aug 2005 - Aug 2008, awarded by the Department of Computer Science and Engineering. University of Nebraska, Lincoln, NE, USA
- 4 Graduated Ph.D. student **Xin Li** received
  - a. Student Scholarship (~\$1000.00 One Time), 2004, awarded by the International Conference on Autonomous Agents and Multiagent Systems (AAMAS’04)
  - b. Student Scholarship (~\$1000.00 One Time), 2003, awarded by the International Joint Conference on Artificial Intelligence (IJCAI’03)
- 5 Graduated M.S. student **Todd Blank** received
  - a. **Best Paper Award** at the International Conference on Computers in Education in 2005 for a paper: L.-K. Soh and T. Blank (2005). An Intelligent Agent that Learns How to Tutor Students: Design and Results, in *Proceedings of International Conference on Computers in Education (ICCE’2005)*, November 28 – December 2, Singapore, pp. 420-427.

- 6 Graduated M.S. student **Yi Liu** received
- a. Student Scholarship (\$350 One Time), 2018, awarded by the Innovative Applications in Artificial Intelligence (IAAI) conference, New Orleans, LA, February 2-7, 2018

**Current Advisees**

- 1 **Yi Xia**, Ph.D. CS (Advisor), 2018 –
- 2 **Yi Liu**, Ph.D. CS (Advisor), 2016 –
- 3 **Chilwoo (Mike) Pack**, Ph.D. CS (Advisor), 2017 –
- 4 **Praval Sharma**, Ph.D. CS (Co-Advisor), 2019 –
- 5 **Patrick Morrow**, M.S. CS (Advisor), 2019 –
- 6 **Anup Adkihari**, M.S. CS (Advisor), 2019 –
- 7 **Dana Hoppe**, B.S. CS (Advisor), 2019 –
- 8 **Jimmy Erickson**, B.S. CS (Advisor), 2019 –

**Past Advisees (Ph.D)**

- 1 **Zion Schell**, Ph.D. CS (Co-Advisor), 2014-2018, July 2018: *Information-Theoretic Methods for Class Label Conflation of Spatiotemporal Data*
- 2 **Adam Eck**, Ph.D., CS (Advisor), 2011-2015, August 2015: *Reflective, Deliberative Agent-Based Information Gathering*
- 3 **Lee Dee Miller**, Ph.D. CS (Advisor), 2008-2014, November 2014: *Cluster-Based Boundary of Use for Selective Improvement to Supervised Learning*
- 4 **Deepti Joshi**, Ph.D. Dissertation (co-advisor), 2007-2011, May 2011: *Polygonal Spatial Clustering*
- 5 **Nobel Khandaker**, Ph.D. CS (Advisor), 2005-2011, May 2011: *Multiagent Coalition Formation in Uncertain Environments with Type-Changing Influences and Its Application Towards Forming Human Coalitions*
- 6 **Carol Spradling**, Ph.D. Education Studies (Co-Advisor), 2004-2007 (May 3, 2007): *A Study of Social and Professional Ethics in Undergraduate Computer Science Programs: Faculty Perspectives*
- 7 **Xin Li**, Ph.D. CS (Advisor), 2001-2007 (April 12, 2007): *Improving Multi-Agent Coalition Formation in Complex Environments*
- 8 **XuLi Liu**, Ph.D. CS (co-Advisor), 2002-2007 (April 9, 2007): *APOP: Automatic Pattern and Object-based Code Parallelization Framework for Clusters*

**Past Advisees (M.S and M.A.)**

- 9 **Sudeep Basnet**, M.S. CS (Advisor), 2017-2019, July 2019: *Analysis of Social Unrest Events Using Spatio-Temporal Data Clustering and Agent-Based Modeling*
- 10 **Julie Rankin**, M.A. Teachers, Learning, and Teacher Education (TLTE) (Co-Advisor), 2018-2019, July 2019: *Impact of Robotic Challenges on Fifth Grade Problem Solving*
- 11 **Venkata Krishna Mohan Sunkara**, M.S. CS (Co-Advisor), 2018-2019, June 2019: *Data Driven Approach to Identify Journalistic 5Ws from Text Documents*
- 12 **Nancy Pham**, M.S. CS (Advisor), January 2018 – September 2018
- 13 **Pooja Ahuja**, M.S. CS (Advisor), 2016-2017, July 2017: *Investigating Diversity in Open Multiagent Team Formation*
- 14 **Bin Chen**, M.S. CS Thesis (Advisor), 2014-2017, June 2017: *Investigating Agent and Task Openness in Ad Hoc Team Formation*
- 15 **Elham Foruzan**, M.S. CS Project (Advisor), 2016 – 2017, April 2017: *Distributed Energy Management in a Microgrid: A Multiagent Reinforcement Learning Approach*

- 16 **Shilpa Kanal**, M.S. CS Thesis (Advisor), 2014 – 2016, December 2016 (May 2017 officially): *Towards Building a Review Recommendation System that Trains Novices by Leveraging the Actions of Experts*
- 17 **Hariharan Arunachalam**, M.S. CS Thesis (Advisor), 2014-2016, August 2016: *Towards Building an Intelligent Integrated Multi-Mode Time Diary Survey Framework*
- 18 **Rasheed Ali Rajabzadeh**, M.S. CS Thesis (Advisor), 2012-2014, July 2014: *Measuring Autonomy and Solving General Stabilization Problems with Multi-Agent Systems*
- 19 **Leonard Cleve Stuart**, M.S. CS Thesis (Advisor), 2012-2014, April 2014: *User Modeling via Machine Learning and Rule-Based Reasoning to Understand and Predict Errors in Survey Systems*
- 20 **Vlad Chiriacescu**, M.S. CS Thesis (Advisor), 2011-2013, November 2013: *November 2013: Understanding Human Learning using a Multiagent Based Unified Learning Model Simulation*
- 21 **Derrick Lam**, M.S. CS Thesis (Advisor), 2009-2013, May 2013: *Improving Virtual Collaboration: Modeling for Recommendation Systems in a Classroom Wiki Environment*
- 22 **Ziyang Lin**, M.S. CS Project (Advisor), 2010-2011, July 2011: *Search and Retrieval of Learning Objects*
- 23 **Adam Eck**, M.S. CS Thesis (Advisor), 2008-2010, November 2010, *Agent Sensing with Stateful Resource*
- 24 **Tao Hong**, M.S. CS Thesis (co-advisor), 2006-2008, November 2008: *Computing Information Gain for Spatial Data Support*
- 25 **L.D. Miller**, M.S. CS Thesis (Advisor), 2003-2007, November 2007: *Genetic Algorithm Classifier System Framework for Semi-Supervised Classification*
- 26 **Jared Kite**, M.S. CS Thesis (Advisor), 2003-2007, June 2007: *A Flexible Framework for Knowledge Engineering and Automation of An Adaptive Conversational Case-Retrieval System*
- 27 **Naresh Arcot**, M.S. CS Project (co-Advisor), 2005-2006, November 2006: *An Adaptive Placement Test for Introductory CS Courses*
- 28 **Todd Blank**, M.S. CS Thesis (Advisor), 2003-2005, November 2005: *ILMDA: An Intelligent Tutoring System with Integrated Learning*
- 29 **Nobel Khandaker**, MS. CS Thesis (Advisor), 2004-2005, August 2005: *VALCAM – An Auction Based Learning Enabled Multiagent Coalition Formation Algorithm for Real-World Applications*
- 30 **Eric Moss**, MS. CS Thesis (Advisor), 2003-2005, August 2005: *Language Boundaries and Excess Programming Complexity*
- 31 **Lei Fu**, MS. CS Thesis (co-Advisor), 2003-2005, August 2005: *Evaluating Quality of Data for the Geospatial Time Series Datasets*
- 32 **Jing Zhang**, M.S. CS Thesis (Co-Advisor), 2002-2004, December 2004: *Polygon-Based Spatial Clustering and Its Application in Watershed Study*
- 33 **Kye Halsted**, M.S. CS Project (Advisor), 2002-2004, December 2004: *Predator/Prey Domains: Analyzing Multiagent Communication in a Noisy Environment*
- 34 **Xuesong Zhang**, M.S. CS Thesis (Co-Advisor), 2002-2004, December 2004: *I-MINDS: An Intelligent Multiagent System Supported Teaching and Cooperative Learning Environment*
- 35 **Suresh Namala**, M.S. CS Project (Advisor), 2002-2004, November 2004: *An Intelligence Module for I-MINDS*
- 36 **Chao Chen**, M.S. CS Thesis (Advisor), 2002-2004, November 2004: *A Multiagent Approach Using Ontology and Operational Learning to Improve Distributed Information Retrieval*
- 37 **Ashok Thirunavukkarasu**, M.S. CS Project (Advisor), 2003-2004, July 2004: *Relaxed Database Retrieval*
- 38 **Jeremy Glasser**, M.S. CS Thesis (Advisor), 2002-2004, May 2004: *Using Adaptive Agents to Create a Continuous Challenge in Computer Games*
- 39 **Jingfei Xu**, M.S. CS Project (Advisor), 2002-2003, July 2003: *Operational Distributed Ontology Learning in a Multi-Agent System*

40 **Juan Luo**, M.S. CS Project (Advisor), 2001-2003, May 2003: *Case-Based Learning Behavior in a Real Time Multi-Agent System*

#### **Committee Members**

- 1 **Josey van Orsdale**, Ph.D. Sociology (committee), 2018 – present (with PhD Minor in Computer Science)
- 2 **Ben Seloske**, Ph.D. Psychology (committee), 2018 – present
- 3 **Warnakulasuriya-Chandima Fernando**, Ph.D. CS (committee), 2018 – present
- 4 **Song Wen**, Ph.D. CS (external examiner), 2018: *Project Scheduling in Distributed and Dynamic Environments*, School of Computer Engineering, Nanyang Technological University, Singapore.
- 5 **Qingshuai Liu**, Ph.D. EE (committee), 2017 – present
- 6 **Elham Foruzan**, Ph.D. EE (committee), 2016 – present
- 7 **Jerry Timbrook**, Ph.D. Sociology (committee), 2017 – present
- 8 **Mengyang (Mia) Wang**, Ph.D. Survey Research and Methodology (committee), 2014 - present
- 9 **Evans Beachly**, M.S. CS (committee), 2016-2017: *An Unmanned Aerial System for Prescribed Fires*
- 10 **Muthukumar Chandrasekaran**, Ph.D. CS (external member, committee), 2016-2017: *Frameworks and Algorithms for Individual Planning under Cooperation*, Department of Computer Science, University of Georgia.
- 11 **Athirai Aravazhi Irissappane**, Ph.D. CS (external examiner), 2015-2016: *Trust Oriented Decision Making via POMDPs*, School of Computer Engineering, Nanyang Technological University, Singapore.
- 12 **Taylor Spangler**, Ph.D. CS (committee), April 2015 – present
- 13 **Kerry Hart, M.S. CS** (committee), November 2013: *DECAF: A New Event Detection Logic for the Purpose of Fusing Delineated-Continuous Spatial Information*
- 14 **Melissa Patterson Hazley**, Ph.D. in Education (committee), 2013 – present
- 15 **Sundeepa Haranath**, M.S. Project, CS (committee), *Spatial Clustering Using Transportation Networks*
- 16 **Michelle Capozzoli**, Ph.D. in Psychology (committee), 2013 – present
- 17 **Salman Kahrobaee**, Ph.D. in Electrical Engineering (committee), 2011 – July 2014: *Reliability Modeling and Evaluation of Distributed Energy Resources and Smart Power Distribution Systems*
- 18 **Steven Becker**, M. S. Project, CS (committee), November 2012, *Impact of Video on the Internet*
- 19 **Richard Powers**, Ph.D. in Instructional Technology (committee), 2011 – April 2015: *Integrating Inquiry-Powered Design-Based Units within the Context of STEM Content: An Exploratory Account of Student and Teacher Attitudes, Experiences, and Perceptions.*
- 20 **Neethu Shah**, Ph.D. CS (committee), 2011 – Present
- 21 **Brian Kokensparger**, Ph.D. in Instructional Technology (committee), 2011 – present
- 22 **Yaling Zheng, Ph.D. CS**, (committee), 2011-present
- 23 **Cate Anderson**, Ph.D., CS (committee), 2007 – 2017, June: *Selecting the “Closest to Optimal” Multiple Sequence Alignment Using Multi-Layer Perceptron.*
- 24 **Yuji Mo**, Ph.D., CS (committee), 2010 – Present
- 25 **Deng Kun**, Ph.D., CS (committee), 2005 – Present
- 26 **Official Examiner, Chattrakul Sombattheera**, Ph.D. CS., University of Wollongong, New South Wales, Australia
- 27 **Johnathan Crosmer**, Doctorate Music (committee), August 2008-April 2011: *A Comparison of Viola Strings with Harmonic-Spectral Analysis*
- 28 **Yijun Lu**, Ph.D., CS (committee, Reader), July 2007: *Improving Data Consistency and Overlay Multicast in Internet-scale Distributed Systems*
- 29 **Indu Latha**, M.S. CS, Project (committee), April 2011: *Comparative Analysis of Peak Detection Techniques for Comprehensive Two-Dimensional Chromatography*

- 30 **Derrick Stolee**, B.S. CS, Thesis (committee), April 2007: *A Multi-Dimensional Spatial Cache for Decision Support Systems*
- 31 **Teik-Ooi Tan**, MEngSc. Thesis (external reviewer, committee), January 2006: *SAR Image Classification and Field Measurement in Antarctica*, Multimedia University, Malaysia
- 32 **DongMin Zhang**, M.S. Project, CS (committee), December 2001: *Baseline Removal in Comprehensive Two-Dimensional Gas Chromatographic Images*
- 33 **XuanLi Liu**, M.S. Thesis, CS (committee), August 2002: *The Web Application of Parking Lot Problem with MLPQ System*
- 34 **Yifeng Zhu**, M.S. Thesis, CS (committee), December 2002: *Design, Implementation and Performance Evaluation of a Cost-Effective, Fault-Tolerant Parallel Virtual File System (CEFT-PVFS)*
- 35 **Yu Lin**, M.S. Project, CS (committee), May 2003: *On-Line Handwriting Recognition*
- 36 **Phanivas Vemuri**, M.S. Project, CS (committee), July 2003: *Multimedia Support for I-MINDS*
- 37 **Arvind Visvanathan**, M.S. Thesis, CS (committee), July 2003: *Archiving and Reporting Formats for Two-Dimensional Gas Chromatography*
- 38 **Visweswara Rao Kottapalli**, M.S. Thesis, CS (committee), August 2003: *Visualization, Processing, and Analysis of GCxGC-TOR MS Images*
- 39 **Christopher Hammack** M.S. Thesis, CS (committee), December 2003: *LASSO: A Learning Architecture for Semantic Web Ontologies*
- 40 **Sarita Navuluru**, M.S. Project, CS (committee), April 2004: *A Semantic Web Approach for Representing Software Process Tailoring Knowledge*
- 41 **Rishi Kumar Venkatarama**, M.S. Thesis (committee), June 2005: *Improving Software Process through Case Based Retrieval*
- 42 **Thomas Osugi**, M.S. Thesis, CS (committee), June 2005: *Exploration-Based Active Learning*
- 43 **Timothy Perrin**, M.S. Thesis, CS (committee), June 2006: *BIT: Bug Identification Tool Learning and Detecting Common Mistakes in Simple Programming Exercises*
- 44 **Matthew Culver**, M.S. Thesis, CS (committee), July 2006: *Active Learning to Maximize Area under the ROC Curve*
- 45 **Catherine Anderson**, M.S. Thesis, CS (committee), November 2006: *A Study on the Effect of Ensemble and Concavity Repair Methods on the Area under the ROC*

## F. POST-DOCTORAL RESEARCHER MENTORING

- 1 **Markeya Peteranetz**, May 2018 – May 2019
- 2 **Lee D. Miller**, March 2017 – December 2018
- 3 **Adam Eck**, May 2015 - August 2016

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## SERVICE

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### A. PROFESSIONAL SERVICES

#### *Editorial Services*

- 1 **Editor**, Special Issue on Research in Computing Education, *IEEE Transactions on Education*, Vol 61, No. 3, 2018
- 2 **Associate Editor**, *IEEE Transactions on Education*, July 1 2014 – present
- 3 **Associate Editor**, *IEEE Transactions on Learning Technologies*, April 2019 – present
- 4 **Guest Editor**, *International Journal of Bioinformatics Research and Application*, Vol 6, No. 4, Special Issue on BIOT-2009.

#### *Steering (Research and Education) Committee*

- 1 **Co-Chair**, *NCWIT Academic Alliance*, 2018-2021

- 2 **Chair**, *SIGCSE Evaluations Chair*, 2021
- 3 **Co-Chair**, SIGCSE Conference Review Supporter Software Committee, for ITiCSE conferences (2016, 2017, 2018)
- 4 **Co-Chair**, SIGCSE Database Administrator Committee, for SIGCSE conferences (2016, 2017, 2018, 2019, 2020)
- 5 **Co-Chair**, *NCWIT Academic Alliance Recruitment and New Member Engagement Project*, 2010-2012
- 6 **Founding Member**, Computer Science Teachers Association (CSTA) NE-Huskies Chapter, NE, 2012
- **Secretary** 2012 – 2015, 2016 - present; **Acting secretary**, 2015 – 2016
- 7 **Member**
- *BMIT Endorsement and IT Supplemental Endorsement Review Team*, Nebraska Department of Education, Fall 2016, Lincoln, NE
  - *CIS Strategic Foresight Meeting*, Nebraska Department of Education, December 7-8, 2015, Lincoln, NE.
  - *IEEE Computational Intelligence Society Emergent Technology Technical Committee Task Force*, 2013
  - Executive Committee, *NCWIT Academic Alliance*, 2010-2012
  - *SIGCSE Committee on Discrete Mathematics*, 2003
  - *ITiCSE Working Group on Concept Inventory for Discrete Mathematics*, 2006
  - *SIGCSE Committee on the Implementation of a One-Semester Discrete Math Course*, 2006

#### **Program or Organizing Committee**

- 1 **Conference Organizer**
- **Program Co-Chair**, *SIGCSE*, 2022, 2023
  - **General Co-Chair**, *2021 IEEE Frontiers in Education Conference (FIE'2021)*
  - **Co-Chair**, Local Arrangements, Program Committee, *International Computing Education Research (ICER) Conference*, August 9-13, 2015, Omaha, NE
  - **Co-Chair**, 6<sup>th</sup> Annual *Biotechnology and Bioinformatics Symposium (BIOT-2009)*
- 2 **Workshop Organizer**
- **Co-Chair**, *SIGCSE'2019 Workshop on Adopting, Integrating, and Evaluating Computational Creativity Exercises to Improve Student Learning*, Baltimore, MD, March 1, 2019
  - **Co-Chair**, *SIGCSE'2018 Workshop on Computational Creativity Exercises for Improving Student Learning and Performance*, Baltimore, MD, February 24, 2018
  - **Co-Chair**, Organizing Committee, *International Workshop on Issues with Deployment of Emerging Agent-Based Systems (IDEAS)* at AAMAS'2016
  - **Chair**, Organizing Committee, *International Workshop on Issues with Deployment of Emerging Agent-Based Systems (IDEAS)* at AAMAS'2015
  - **Chair**, Organizing Committee, *2004 AAI Workshop on Forming and Maintaining Coalitions and Teams in Adaptive Multiagent Systems at 19<sup>th</sup> National Conference on Artificial Intelligence (AAAI'2004)*
  - **Chair**, Organizing Committee, *2002 AAI Workshop on Coalition Formation in Dynamic Multiagent Environments at 18<sup>th</sup> National Conference on Artificial Intelligence (AAAI'2002)*
  - **Chair**, *Nebraska Tapestry Workshop*, July 23-25, 2012
  - **Member**, Organizing Committee, *2001 AAI Fall Symposium Series: Negotiation Methods for Autonomous Cooperative Systems*
- 3 **Technical/Program Committee**
- *ACM International Computing Education Research (ICER) Conference*, 2017, 2018, 2019
  - *International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 2008, 2011, 2012, 2015, 2016, 2017 (Senior PC), 2018, 2019 (Senior PC), 2020
  - *International Joint Conference on Artificial Intelligence (IJCAI)*, 2016, 2017, 2019 (Distinguished PC Member)

- *AAAI Conference on Artificial Intelligence*, 2016, 2017
- *International Conference on Computer Supported Education (CSEDU)*, 2013
- *International Conference on Intelligent Tutoring Systems (ITS)*, 2010
- *International Conference on Artificial Intelligence in Education (AIED)*, 2009
- *4<sup>th</sup> Annual Microsoft ConferenceXP Workshop*, 2006
- *Pattern Recognition in Remote Sensing (PRRS) 2006 Workshop*
- *International Conference on Machine Learning (ICML)*, 2006
- *Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, 2004, 2005, 2006, 2007
- *Eighth International Conference on Information and Knowledge Management (CIKM'99)*, Kansas City, Missouri, November 2-6, 1999

### **Reviewer or Referee**

#### **1 Proposals**

- *NSF DRK12 Review Panel*, 2019
- *NSF DRMS CAREER Review*, 2018
- *NSF SciSIP Review*, 2015
- *NSF IOS Review*, 2010, 2011
- *NSF CCLI Review Panel*, 2005, 2009
- *NSF ALT Proposal Review Panel*, 2008, 2009
- *NSF US-Egypt Joint Fund Program; Landmark Identification*, 2007
- *Science Foundation Ireland*, 2000-2001

#### **2 Journals**

- *ACM Transactions on Computing Education*, 2019
- *Canadian Aeronautics and Space Journal*, Spring 1998
- *Canadian Journal of Remote Sensing*, 2001
- *Computational Intelligence*, 2015
- *International Journal of Applied Intelligence*, Spring 1997
- *International Journal of Artificial Intelligence in Education*, 2007, 2008, 2009, *Specialist Reviewer*
- *International Journal of Human-Computer Studies*, 2003, 2004, 2006, 2011, 2017, 2018
- *International Journal of Remote Sensing*, 2000, 2001, 2003
- *Web Intelligence and Agent Systems*, 2007
- *Journal of Autonomous Agents and Multiagent Systems*, 2010, 2011, 2013
- *Journal of Computer-Assisted Learning*, 2006
- *Journal of Concurrent Engineering: Research and Applications, Special Issue on Applications of Artificial Intelligence to Systems Engineering*, 1994
- *Journal of Engineering Education*, 2017
- *Photogrammetric Engineering and Remote Sensing (PE&RS)*, 2003
- *IEEE Transactions on Education*, 2006
- *IEEE Transactions on Geoscience and Remote Sensing*, 2001, 2002, 2003, 2004, 2006, 2007
- *IEEE Transactions on Human-Machine Systems*, 2018
- *IEEE Transactions on Knowledge and Data Engineering*, 2003
- *IEEE Transactions on Learning Technologies*, 2009, 2010, 2011, 2013, 2015, 2016, 2017
- *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 2001
- *IEEE Transactions on Systems, Man, and Cybernetics*, 2002
- *PLOS One*, 2016

#### **3 Conferences**

- *SIGCSE Technical Symposium on Computer Science Education (SIGCSE)*, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2016
- *Frontiers in Education*, 2008, 2013
- *Symposium on Applied Computing (SAC)*, Intelligent/Innovative Learning Environments track, 2010
- *Electronic Information Technology Conference (EIT)*, 2005

- *International Conference on Knowledge-Based Computer Systems (KBCS)*, 2002.

#### 4 Others

- *BigSurv18* Student Research Paper Competition, 2018
- Reviewer, *NCWIT Undergraduate Research Mentoring 2014 Award*, 2014
- Reviewer, *Layman Foundation Internal Competitive Grant Program*, 2013
- Reviewer, *National Center for Women and IT (NCWIT) Seed Fund Proposals*, 2007, 2008, 2009
- Proposal Reviewer, *National Center for Information Technology in Education (NCITE) Seed Grant Proposals*, 2003

#### *Session Chairs*

1. Session Chair, on Teaching with Teams, *SIGCSE 2016*, March 3, 2016, Memphis, TN.
2. Session Chair, on Session E-Books, *International Computing Education Research (ICER) Conference*, August 11, 2015, Omaha, NE.
3. Session Co-Leader/Speaker, Next Generation of Math and Science Teachers, *Nebraska Summit on Math and Science Education*, December 8, 2014, Lincoln, NE.
4. Session Chair, Session T3J, *Frontiers in Education (FIE'2007)*, 2007.
5. Session Chair, Session S1G: First and Second Year Programs III, *Frontiers in Education (FIE'2013)*, 2013.
6. Session Chair, Session S3C: Student Beliefs, Motivation, and Persistence III, *Frontiers in Education (FIE'2013)*, 2013.

#### *Others*

1. Invited participant, *Future Directions in Computing Education Summit Meeting*, January 8-9, 2014, Orlando, FL.
2. Panelist, Interactive Session, NCWIT May Meeting, 2009
3. Judge, Grace Hopper Conference Undergraduate Finals, 2015
4. Panel Judge, Undergraduate Research Posters, The First MINK Women In Computing Conference at Kansas City (MINK = Missouri, Iowa, Nebraska, and Kansas)
5. Panelist, Teaching Attracting Girls to Computing Workshops (TAG Workshops), hosted by University of Virginia, January 26, 2013

#### **B. UNIVERSITY SERVICES**

##### *Leadership*

1. **Academic Leader** (Temporary), Center for the Integration of Research, Teaching, and Learning (CIRTL) Network at UNL, January – June 2016
2. **Leader**, Informatics Minor Faculty Discussion Group, December 2012 – 2015
3. **Co-Chair**, College of Arts and Sciences, Inclusion, Diversity, Equity, and Access (IDEA) Committee, AY2019-2020
4. **Chair**, College of Arts and Sciences, Curriculum and Advising Committee, AY2011 – 2012
5. **Director**, National Center for Information Technology in Education (NCITE), Fall 2005, defunct
6. **Faculty Advisor**, Malaysian Student Association (NUMSA), Fall 2005 – Summer 2018

##### *Advisory Boards & Councils*

1. UNL Tech Edge + Code.org, January 2018 – present
2. Member, Professional Education Committee (PEC), College of Education and Human Sciences, March 2019 – present
3. Member, Faculty Advisory Board, UNL Social and Behavioral Sciences Research Consortium (SBSRC), 2016 – present
4. Member, Research Council, UNL, August 2013 – July 2016
5. Member, Advisory Board, UNL NUGrant System, 2008, 2009
6. Member, Instructional Technology Advisory Committee (ITAC), UNL Office of Academic Affairs, Fall 2004

##### *Committees*

- **Member**, College of Arts and Sciences, Associate Dean for Faculty Search Committee, Spring 2020
- **Member**, College of Education and Human Sciences, Professional Education Committee, Spring 2019 – present

- **Member**, College of Engineering, Search Committee for Engineering Education Research, Fall 2018 – Spring 2019
- **Member**, College of Engineering, Promotion and Tenure Committee, Fall 2017 – Summer 2020 (three-year term)
- **Member**, College of Engineering, Curriculum Committee, Fall 2007 – Spring 2009
- **Member**, College of Arts and Sciences, IDEA (Inclusion, Diversity, Equity, and Access) Committee, Fall 2017 – present (**Founding Member**, AY 2018-2019).
- **Member**, College of Arts and Sciences, Ad-Hoc College Committee on the College Distribution Requirements, College of Arts and Sciences, University of Nebraska, Spring semester, 2012
- **Member**, College of Arts and Sciences, Curriculum and Advising Committee (three-year term), Fall 2009 – Spring 2012
- **Member**, Center for Brain, Biology, and Behavior (CB3), Search Committee for Neuroimaging Processing Analytics, UNL, Spring 2018, Fall 2018 – Spring 2019
- **Member**, CIRTL Network at UNL (CIRTL@Nebraska), Steering Committee, August 2016 – present
- **Member** (three-year term), University-Wide Departmental Teaching Award, 2008 – 2010
- **Member**, Holling Family Master Teacher Award/UNL University-Wide Distinguished Teaching Award, Review Committee, Spring 2015
- **Member**, Public Policy Center, Promotion Review Committee, 2014
- **Member**, School of Biological Sciences, Ecological Modeling Search Committee, AY2011 – 2012

#### **Review Teams**

- **Member**, Internal Review Team, for Center for Digital Research in the Humanities (CDRH), Spring 2017

#### **Panels**

- **Panel Member**, “Women in IT – A grassroots movement”, Fall UNL IT Leadership Conference “Opportunity that Scales: Women Advancing the Future of Information Technology and Computer Science”, University of Nebraska, Lincoln, NE, November 16, 2015
- **Panel Member**, “Building Transdisciplinary Research Collaborations”, UNL Research Fair, University of Nebraska, Lincoln, NE, November 11, 2015
- **Panel Member**, From Undergraduate to Research Professor, UNL NASA Spacegrant Undergraduate Workshop, August 12, 2010
- **Panel Member**, Research Development Fellow Program (RDFP) on “Integrating Research and Education”, UNL, May 11, 2010
- **Panel Member**, College of Engineering Women Interested in Engineering (WIIE) Day, Fall 2006

#### **Others**

- Speaker, “Computational Thinking, Rubik’s Cube and Magic”, March 26, 2019, *Teen Science Café*, UNL Extension’s Initiative at Lighthouse, Lincoln, NE
- Member, UNL Discipline-Based Education Research (DBER) Group, February 2015 – present
- Speaker and Activity Leader, Workshops on Computer Science and Computational Thinking, Nebraska Women Science Conference, Lincoln, NE, February 14, 2015
- Speaker, *STEM Explorers*, Culler Middle School Community Learning Center, Lincoln, NE, June 5, 2014
- Speaker, College of Engineering Big Red Letter Day, Fall 2006, Fall 2008
- Participant, College Access Days, April 7, April 17, 2014
- Member, Review Panel, for Design Studio Position, J.D. Edwards Honors Program, UNL, 2008
- Member, Review Panel, for Program Specialist Application, Biological Systems Engineering, IANR, Spring 2007
- Member, Review Panel, for Grants Coordinator Application, Sponsored Programs, UNL, 2006 – 2007
- Member, Reviewer Panel, Initiative for Teaching and Learning Excellence, UNL, 2005

### **C. DEPARTMENTAL SERVICES**

#### **Leadership**

- **Chair**, Curriculum CAI Proposal (May 2019 – present)
- **Co-Chair**, 50<sup>th</sup> Anniversary Celebration Committee (Fall 2018 – Spring 2019)
- **Chair**, P&T Committee for Associate to Full Professorships (Fall 2019)

- **Chair**, Colloquium Series Committee (Fall 2003 – Spring 2004)
- **Chair**, Year-End Reception and Awards Ceremony Committee (Spring 2003 – Spring 2005)
- **Chair**, Newsletter committee (Fall 2002 – Spring 2005)
- **Co-Chair**, Teaching and Learning Improvement Committee (Fall 2016 – present)
- **Co-Chair**, Diversity Committee (Fall 2018 – present)
- **Chair**, Graduate Recruitment and Outreach Subcommittee (Fall 2012 – Summer 2014)
- **Chair**, Curriculum Committee (Fall 2007 – Summer 2009)
- **Chair**, Curriculum Renaissance Computing Subcommittee (Fall 2007 – Summer 2009)
- **Chair**, Curriculum ACE Compliance Subcommittee (Fall 2009 – Spring 2013)
- **Regional Affiliate Co-Coordinator**, NCWIT Aspirations in Computing Awards Regional Affiliate (Fall 2014 – present)
- **Faculty Co-Advisor**, ACM Student Local Chapter, (Fall 2004 – Summer 2009)
- **Assistant Editor**, CSE Newsletter (Fall 2002 – Spring 2005)
- **Assistant Coordinator**, Regional ACM Programming Contest Committee (Fall 2004)
- **Chair**, Promotion Committee for Chris Bourke, 2016
- **Chair**, Search Committee for Outreach/Communications Staff, 2016

#### **Committees**

- **Member**, Department Chair Search Committee, UNL, 2019
- **Member**, Curriculum Committee (Fall 2002 – Spring 2013)
- **Member**, Curriculum Committee for Re-Design of Fundamental CS Classes (Summer 2002)
- **Member**, Graduate Committee (Fall 2002 – Spring 2003, Fall 2012 – Summer 2014, Fall 2016 - present)
- **Member**, Diversity Committee (Fall 2014 – present)
- **Member**, Outreach Committee (Fall 2006 – 2014)
- **Member**, CSE Day Committee (Spring 2003)
- **Member**, Facilities Committee (Fall 2001, Spring 2002, Fall 2007)
- **Member**, Services Committee (Fall 2002)
- **Member**, Faculty Search Committee (Fall 2001, Spring 2002, Fall 2014 – Spring 2015)
- **Member**, Technical Report Committee (Summer 2002, Fall 2002)
- **Member**, Ph.D. Qualifying Examination Committee (Fall 2001 – Spring 2018)
- **Member**, ABET/CSAB Accreditation Committee (Fall 2005, Spring 2006, Fall 2008 – Spring 2009)

#### **Speakers**

- **Session Leader** (four sessions) for “Computational Thinking, Computer Science and CS Unplugged”, Discover Engineering Day, University of Nebraska, Lincoln, NE, October 12, 2015.
- **Speaker and Session Leader** for “Computational Thinking” and “Hour of Code” sessions, Girl Scouts Code Camp: Tap into your Appotential, Lincoln, NE, June 17, 2015.
- **Coordinator and Assistant for** “Dash-Dot Robots” session, Girl Scouts Code Camp: Tap into your Appotential, Lincoln, NE, June 18, 2015.

#### **Others**

- **Faculty Co-Leader**, Grace Hopper Conference Team (Fall 2015)
- **Member**, Institute for International Teaching Assistants (ITA) Panel (Summer 2002, Fall 2002, Summer 2008)
- **Table Host**, Women in Science Conference, 2017
- **Table Host**, Distinguished Scholars Dinner, 2007, 2008, 2010
- **Table Host**, Distinguished Scholars Day, 2014

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### **PRESS**

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- 1 “Digital Libraries, Intelligent Data Analysis, and Augmented Description: A Demonstration Project”, highlighted in *LC Labs Letter*, November 13, 2019, Library of Congress.
- 2 “Nebraska researchers partner with Library of Congress,” Deann Gayman, *Nebraska Today*, November 8, 2019. <https://news.unl.edu/newsrooms/today/article/nebraska-researchers-partner-with-library-of-congress/> (also on *CSE Bits & Bytes*, November 13, 2019)

- 3 “Boosting Educators’ Computer Science Knowledge,” *2018-2019 Nebraska Research Report*, The Board of Regents of the University of Nebraska, [http://research.unl.edu/annualreport/2019/#story\\_id\\_31](http://research.unl.edu/annualreport/2019/#story_id_31)
- 4 “CAS Teaching Academy Tips,” *CAS Matters*, October 24, 2019, <https://app.vidgrid.com/view/GxhKKTcexauM/?sr=MYgY9I>
- 5 “Soh working to automate task planning in complex scenarios,” Victoria Grdina, *Nebraska Today*, October 11, 2019, <https://news.unl.edu/newsrooms/today/article/soh-working-to-automate-task-planning-in-complex-scenarios/> (also on *NebraskaSCIENCE*, November 08, 2019)
- 6 “New research examines multi-agent task planning in open environments,” *CSE Bits & Bytes*, University of Nebraska-Lincoln Announce, September 25, 2019, <https://newsroom.unl.edu/announce/cse/10108/59687>
- 7 “New research, algorithm could predict development of social issues,” *CSE Bits & Bytes*, University of Nebraska-Lincoln Announce, September 18, 2019, <https://newsroom.unl.edu/announce/cse/10107/59446>
- 8 “Summer of Machine Learning Collaboration with the University of Nebraska-Lincoln,” by Eileen Jakeway, *The Signal*, the Library of Congress, September 16, 2019, <https://blogs.loc.gov/thesignal/2019/09/summer-of-machine-learning-collaboration-with-the-university-of-nebraska-lincoln/>
- 9 “Rural teachers receive STEM leadership training at Nebraska,” University Communication, August 15, 2019, <https://news.unl.edu/newsrooms/today/article/rural-teachers-receive-stem-leadership-training-at-nebraska/>
- 10 “UF/IFAS Faculty Launches New Approach to Massive Open Online Courses with University of Nebraska-Lincoln Collaborators,” <https://blogs.ifas.ufl.edu/news/2019/02/21/uf-ifas-faculty-launches-new-approach-to-massive-open-online-courses-with-university-of-nebraska-lincoln-collaborators>
- 11 “UNL, LPS to co-host Hour of Code event, promote computing in all disciplines,” *The Daily Nebraskan*, December 7, 2018, [http://www.dailynebraskan.com/news/unl-lps-to-co-host-hour-of-code-event-promote/article\\_f3b7368a-f9c3-11e8-b074-674fdacf55ca.html](http://www.dailynebraskan.com/news/unl-lps-to-co-host-hour-of-code-event-promote/article_f3b7368a-f9c3-11e8-b074-674fdacf55ca.html)
- 12 “Ingraham honored for contributing outstanding intro computer science curricula,” *UNL Announce*, Hixson-Lied College, October 24, 2018
- 13 “Husker team aims to strengthen Nebraska’s K-8 computer science curriculum,” *Nebraska Today*, October 24, 2018.
- 14 “STEM project to benefit rural elementary schools,” *Nebraska Today*, April 18, 2018.
- 15 “Soh’s project combines computational, creative thinking,” *CSE Bits and Bytes*, March 7, 2018, based on ACM Inroads article.
- 16 “Computation Creativity: An Interview with UNL’s Elizabeth Ingraham and Leen-Kiat Soh”, Opinion page of *ACM Inroads*, volume 9, no. 1, pp. 19-21, by Beth Quinn. Reposted as a resource: [www.ncwit.org/engage-acm4](http://www.ncwit.org/engage-acm4)
- 17 “New Course at Nebraska Explores Computational Creativity,” *a2ru.org*, by Kathie Andersen, August 28, 2017 (<http://a2ru.org/knowledgebase/new-course-nebraska-explores-computational-creativity/>)
- 18 “New course explores computational creativity”, *Hixson-Lied College of Fine and Performing Arts News*, by Kathe C. Andersen, August 24, 2017 (<http://arts.unl.edu/art/news/new-course-explores-computational-creativity>)
- 19 “UNL teams up with LPS to teach, mentor young students in coding, app development”, *The Daily Nebraskan*, April 4, 2017
- 20 “Soh and Lorang Receive New Grant”, *CSE Bits & Bytes*, November 23, 2016
- 21 “Researchers push software to work more like human eye”, *Nebraska Today*, November 15, 2016, by Deann Gayman

- 22 “Will AI replace your TA? UNL professor says not anytime soon”, *The Daily Nebraskan*, November 3, 2016, by Elizabeth Rambert
- 23 10-11 News at 10 Special Report: Students Learn to Code, Courtney Johns reports, January 31, 2016. <http://www.1011now.com/home/headlines/Learning-Coding-In-Lincoln-367203151.html>
- 24 “Finding Poetry Amid Historic News Pages”, featured in *Research at the University of Nebraska-Lincoln, 2014-2015 Report*, p. 17. <http://research.unl.edu/annualreport/2015/finding-poetry-amid-historic-news-pages/>
- 25 “Creativity 101 encourages creative thinking, hands-on classwork”, *The Daily Nebraskan*, November 10, 2015.
- 26 “Researchers mine poetry from 8M news pages”, Year in Review 2014-2015, *The Scarlet*, September 30, 2015, vol. 25. No.3.
- 27 “New informatics minor to be available next fall”, by Lauren Reams, with Art by Ian Tredway, *Daily Nebraskan*, February 11, 2015.
- 28 “How to Find a Poem in 200-Year-Old Newspaper”, by Jackie Sojico, NET Radio, Broadcast on November 1, 2014 (8:34 AM) and November 2, 2014 (9:34 AM), live streaming: <http://netnebraska.org/interactive-multimedia/radio/how-find-poem-200-year-old-newspapers>
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- 30 “Project mines 8 million news pages for poetry”, *UNL Today*, October 13, 2014. <http://news.unl.edu/newsrooms/unltoday/article/project-mines-8-million-news-pages-for-poetry/>
- 31 NCRN Focus: University of Nebraska-Lincoln, *NSF-Census Research Network Newsletter*, 1(2).
- 32 Demetria Stephens (2012). Sold-out Malaysian Night to have authentic food, theater, *University Daily Nebraska*, March 30, 2012.
- 33 “GEM Gets Girls Involved in Computing”, *UNL Announce*, November 16, 2011
- 34 Lee, Melissa. (2009). Breaking Down the Gender Barrier, *Lincoln Journal Star*, July 6, 2009.
- 35 “UNL and China Explore ‘Hydroinformatics Collaboratory’”, School of Natural Resources news, July, 2008.
- 36 “Great minds think together”, *Daily Nebraskan*, vol. 107, issue 107, Wednesday, October 10, 2007
- 37 “Soh’s software monitors, aids learning”, *Scarlet*, vol.18, no. 21, September 4, 2008.
- 38 “Soh fine-tunes software that helps monitor, enhance student learning”, *Scarlet*, vol. 17, no. 23, October 4, 2007.
- 39 Asia-Pacific Society for Computers in Education, *APSCE Newsletter*, “Showcase on ICCE2005 Best Paper Awards”, Issue 2, August 2006, pp. 5-6.
- 40 Derrick, D. (2003). Balancing Creative Challenges, *Contacts: After Hours, Nebraska’s Engineering Magazine*, Summer 2003, p. 30.
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#### HONORS/PROFESSIONAL SOCIETY MEMBERSHIPS

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- 1 Phi Kappa Phi National Honor Society
- 2 Phi Beta Delta National Honor Society
- 3 Tau Beta Pi National Honor Society for Engineers
- 4 Eta Kappa Nu National Honor Society for Electrical Engineers
- 5 Golden Key National Honor Society
- 6 Institute of Electrical and Electronics Engineers (IEEE)
- 7 American Association for Artificial Intelligence (AAAI)
- 8 Association for Computing Machinery (ACM)