

Vita for
Charles Paul Riedesel, Ph. D.
Computer Science and Engineering - UNL
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Education

- Wheaton College, Physics and Mathematics, BS, May 1973
- University of Missouri - Columbia, Electrical Engineering
- University of Nebraska - Lincoln, Computer Science, MS, May 1992
- University of Nebraska - Lincoln, Computer Science, Ph.D, Dec 1995

Appointments

- Assistant Professor of Practice (and Chief Undergraduate Advisor Computer Science and Engineering), University of Nebraska - Lincoln, Aug 2008-
- Senior Lecturer (and Chief Undergraduate Advisor, Computer Science and Engineering), University of Nebraska - Lincoln, Aug 1997-2008
- Visiting Assistant Professor, University of Nebraska - Lincoln, Aug 1995-1997
- Graduate Teaching Assistant, University of Nebraska - Lincoln, Aug 1989-1995
- Instructor, Southeast Community College - Beatrice, Aug 1980-1989
- Instructor for Gifted, Educational Services Unit 5, Aug 1978-1980

Professional Memberships and Affiliations

- Computer Society of IEEE, 1996 to date.
- ACM, 1987 to date.
 - SIGCSE (Computer Science Education)
 - SIGCSE (Algorithms and Computation Theory)
 - CSTA (Computer Science Teachers Association)
- ASEE (American Society for Engineering Education), 2006 to date.

Professional Service Activities

- Site Administrator for ACM Regional Programming Contests, 1998 to date.

Awards

- 5 time recipient of *Certificate of Recognition for Contributions to Students* by the UNL Teaching Council and the Parents Association.
- Department Recognition: *Students Choice Outstanding Teaching Award (for lower division classes)*, 2006-7 academic year.

- Department Recognition Award for *outstanding contributions to the Department for the 2005-2006 academic year*.
- 6 time recipient of *Certificate of Achievement* for coaching programming teams to the World Finals, including a 26th place finish (out of 88) in Tokyo, 2007.
- Nominee for *2005 Chancellor's Award for Exemplary Service to Students*.
- Nominee for *2008 James V. Griesen Exemplary Service to Students Award*. (results pending)

Publications (CS Education Oriented)

- Charles P. Riedesel, Eric D. Manley, Susan Poser, Jitender S. Deogun, *A Model Academic Ethics and Integrity Policy for Computer Science Departments*, accepted for SIGCSE 2009 Symposium, to appear in SIGCSE Bulletin – Inroads.
- Multiple authors, *Developing a Computer Science-specific Learning Taxonomy*, SIGCSE Bulletin – Inroads, vol 39, no 4, 152-170, December 2007. (Developed from a Working Group at ITiCSE 2007 in Dundee, Scotland. Section 6, *A New Taxonomy for Computer Science*, was composed jointly by me, Tuukka Ahoniemi, and Essi Lahtinen. I also did a large part of the editing of the entire paper for grammar and clarity.)
- Multiple authors, *Concept Inventories in Computer Science for the Topic Discrete Mathematics*, SIGCSE Bulletin – Inroads, vol 38, no 4, 132-142, December 2006. (Developed from a Working Group at ITiCSE 2006 in Bologna, Italy. Section 8, *Proposed Process for Creating a DMCI*, was composed jointly by me and LeenKiat Soh. I also did a large part of the editing of the entire paper for grammar and clarity.)
- Multiple authors, *A Synthesis of Computing Concepts*, SIGCSE Bulletin – Inroads, vol 37, no 4, 162-172, December 2005. (Developed from a Working Group at ITiCSE 2005 in Lisbon, Portugal. I was part of the discussions and initial drafting, but overall had only a minor role in the actual writing.)
- Multiple authors, *Striving for Mathematical Thinking*, SIGCSE Bulletin – Inroads, vol 33, no 4, 114-124, December, 2001. (Developed from a Working Group at ITiCSE 2001 in Canterbury, UK. I was part of the discussions and initial drafting, but overall had only a minor role in the actual writing.)

Publications (Other Technical)

- J.S. Deogun, C.P. Riedesel, *Hamiltonian Cycles in Permutation Graphs*, The Journal of Combinatorial Mathematics and Combinatorial Computing, 1998, vol 27, 161-200.
- J.S. Deogun, C.P. Riedesel, *Permutation Graphs: Hamiltonian Paths*, The Journal of Combinatorial Mathematics and Combinatorial Computing, 1995, vol 19, 55-63.
- J.S. Deogun, C.P. Riedesel, *Traceability and Toughness in Permutation Graphs*, Technical Report No. UNL-CSE-95-004, April, 1995.

Synergistic Activities

- The position of Chief Undergraduate Advisor involves directly working with all the approximately 300 majors (ranging as high as 650) in computer science and in computer engineering including honors advisees, and being chair of the Undergraduate Advising Committee and member of the Curriculum Committee. Activities include the following:
 - Academic advising which includes coordinating with College advising services, training opportunities, advising materials production, transfer course analyses, degree audit analyses, etc. as well as the stereotypical semester course registration advising.
 - Personal advising which has included coordinating with mental health service providers and fam-

ilies.

- Career advising which includes coordinating with Career Services, promoting internships, meeting with employers, publicizing employment opportunities, etc.
- Promotional activities which include extensive reference letter writing, communications with scholarship providers, undergraduate research providers, international exchange programs, assisting with resumes, etc.
- Involvement with numerous administrative functions pertaining to the department's educational program, including promotional and advising publications, coordinating course scheduling, faculty assignments, TA assignments and their supervision, enrollment data analysis and reporting.
- Typically the first departmental point of contact for prospective majors. Participation in the New Student Enrollment program. Active in various recruitment activities.
- CSE Day committee member and developer/coordinator for many of the contest problems.
- Long time member on PhD Qualifying Exam Committees for Theory and for Applications (Database & Information Retrieval); most recently chairing the Applications Committee.
- Worked in a research project on voting technology and vulnerability to attack, with particular emphasis on firmware/hardware. This has resulted in a public presentation and in testimony at a Unicameral committee hearing.
- Development of a breadthwise, science oriented introductory course in computer science for majors and non-majors during late 1990's. About 200 students each year now take this course.
- Through the Curriculum Committee extensive involvement with curriculum development especially through the Reinvent process and chairing working group to update Computer Engineering curriculum, textbook selection, Computer Engineering joint committee with Electrical Engineering, ABET/CSAB Accreditation Committee.
- Regular teaching assignments at both undergraduate and graduate level. Includes at least 18 different courses over 17 years.
- Spearheaded establishment of the departmental Academic Integrity Policy after uncovering and effectively dealing with a cheating scandal in an upper level course in early 2000's.
- Conducted summer workshops for high school teachers in mathematics and computer science for several years. Topics include computer science education in the high schools, mathematical foundations of computer science, using programming languages to teach computer science concepts.
- Long-time ACM Student Chapter faculty advisor.
- Faculty Advisor for the reestablished Upsilon Pi Epsilon honor society for the computing sciences (Fall 2008).
- Oversaw the expansion of the department's ACM Regional Contest site into the largest and best funded of the North Central Region, and coaching the department's teams to International Finals berth in seven of the past eleven years.
- Participation on the curriculum committee of the J.D. Edwards Honors Program in Computer Science and Management during its initial formation.
- Regular involvement in ACM's SIGCSE (Special Interest Group in Computer Science Education) conferences and activities including the Math-Thinking Group.
- Sponsor of UCARE students in undergraduate research.

Other Interests and Activities

- Church organist, treasurer, and pastoral search committee member.
- Kiwanis member (former chair) for many years.
- Adopted and raised two foster children.

- Gage County Democratic Party chair for many years, active in several campaigns, State Central Committee member and presently on the Platform Committee.
- Member of organizations promoting civil rights, justice, peace.
- Enjoy classical music, history, archeology, astronomy, science in general.
- Read Science News, Scientific American, Astronomy for relaxation.