

## WRITTEN PROPOSAL GUIDELINES

Written proposals should provide an overview of the project with enough details that Students and Instructors have a good understanding of its scope. In particular, you should address the following items.

**Project Description** – Briefly describe the problem to be solved, the type of project (ie development, research, etc.) the anticipated level of effort needed, and any opportunities available to the students as a result of working the project.

**Resources** – Describe any existing software, hardware, or human resources available to the Students for the project.

**Technology** – Describe potential approaches already identified. These approaches may include particular technologies or general frameworks.

**Deliverables** – Describe the deliverables desired.

**Schedule of Availability:** In the past we have found student schedules and sponsor schedules do not align unless we plan it in advance.

## SIGNIFICANT DATES

Projects run for up to 2 semesters. The iLAB can receive letters of intent at any time for a specific semester start. Cut-off and Semester start dates are as follows:

### Fall Semester:

**Cut-off Date:** First Friday in July

**Start Date:** Second Monday in August

### Spring Semester:

**Cut-off Date:** First Friday in November

**Start Date:** First Monday after New Year

## CONTACT INFORMATION

Casey Tubbs, Managing Director iLAB

217 Schorr Center

P.O. Box 880115

Lincoln, NE 68588-0115

ctubbs@unl.edu / InnovationLab@cse.unl.edu / <http://cse.unl.edu/InnovationLab>



UNL Department of Computer  
Science & Engineering

256 Avery Hall / Lincoln, NE 68588-0115  
(402) 472-2401 / [www.cse.unl.edu](http://www.cse.unl.edu)

UNIVERSITY OF  
**Nebraska**  
Lincoln

The University of Nebraska-Lincoln is an equal opportunity educator and employer with a comprehensive plan for diversity.



## UNIVERSITY OF NEBRASKA-LINCOLN COMPUTER SCIENCE & ENGINEERING

# INNOVATION LAB (ILAB)

## REQUEST FOR CORPORATE SPONSORSHIP OF SENIOR DESIGN CAPSTONE PROJECTS

The University of Nebraska Lincoln Innovation Lab (LAB) invites your company to participate in the Senior Design Capstone Course for the upcoming senior class. Meet seniors, work with them during their senior year, challenge them, and see what they have to offer your company. At the same time, participate in their education. Your company participation is in the form of a project definition and progress reviews along with funding or in-kind subject matter expertise. Your company can define a project that includes the following efforts:

- 1 Analysis and Prototype to refine requirements from a baseline approach
- 2 Options Assessment against known requirements and either known or to be defined evaluation criteria,
- 3 Development against fixed requirements;
- 4 Any combination of the above three.

The project scope is unbounded, and can include Electrical engineering, software engineering, business, architecture, psychology, math, etc.

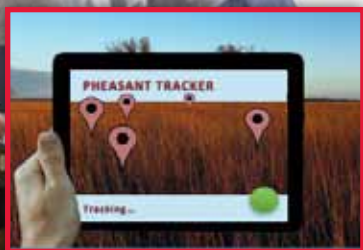
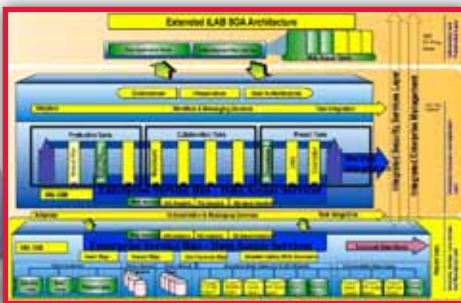
## SAMPLE 2012 SENIOR DESIGN CAPSTONE PROJECTS

In addition to learning and performing Project Management, Team Building skills, the students of the 2012 course have been involved with:

**Drone Flight Control:** Don't look now but there is a drone follow-ing your phone!  
Students studied and performed development in: real time embedded flight con-trol, testing of flight control performance, real time tracking, mechanical – control interactions, safety, repair and maintenance, iOS & Android application development.



**iLAB-Services:** A successful SOA effort? You bet – a little at a time!  
Students studied and performed development in: Soft-ware as a service, Infrastructure as a service, service level agreements, Service Oriented Architectures, Enterprise Service Buses, Data Access services, Web Services, Java Messaging Services, Pub/ Sub, Orchestration, Semantics and Context modeling.



**Pheasant Tracking:**  
We know where they are, and where they have been! Students studied and performed development in: Mobile adhoc networks; RF performance, severe operating environments; aviary domain data assessments, storage, retrieval and reporting; iOS and Android application development; Web development, and more.

## THE I-LAB ENVIRONMENT

The iLAB provides a very flexible environment for students to interact with industry. The iLAB itself runs like a subcontractor to your company, with the senior capstone project student body as employees and the University infrastructure, subject matter experts (masters students, and PhD candidates) available as resources. The iLAB management provides coaching, mentoring, and quality reviews of the student products, and assures the projects are moving forward to the customer satisfaction, and the students are obtaining credit toward their degree.

## BECOMING AN I-LAB CUSTOMER

The process for becoming a customer of the iLAB is straight forward and in-volves:

**Submit a Letter of Intent** – A short letter indicating your interest in sponsoring an Innovation Lab project and your commitment to fund the \$5K administrative, infrastructure and subject matter expert fee.

**Present your Project** – Project proposals will involve a written description.

**Teams are formed, and your company is notified of the team composition** - The teams (typically 4 students) are selected based on a broad spectrum of data sets that provide a best fit to the project and corporate needs. You will be provided all resumes of interested students.

A written letter of intent should be submitted to the Innovation Lab Director indicating your interest in sponsoring an Innovation Lab Senior Design Cap-stone project. This letter constitutes a commitment, and is necessary for successfully planning of subsequent steps. Project details are not necessary, but the letter should provide an overview of the project and the individuals involved.

