Industry Partnerships

Committed to sustaining and expanding strong relationships with industry partners to promote student success

www.cs.iastate.edu

ALL SCIENCE IS COMPUTER SCIENCE
Thanks for your interest in partnering with the Department of Computer Science! The department has a long history of working with industry to promote student success. The 100% placement of CS students in the job market or in advanced study is due in part to this collaboration! Industry partners also have a great opportunity to introduce future employees to their company’s goals and working culture. The personal connection between the student and the recruiting company makes them feel confident in their choice for future employment!

This brochure will help you find ways to influence the culture of IT through connections with students of all ages. As a sponsor of our programs, your company will be featured on all publicity and promotional materials, and students will be encouraged to contact you to discuss mutually beneficial opportunities!

**ISU CS/Industry Partnership benefits:**
- Gets you in front of our students - your future workforce!
- Increase our students’ skill sets with projects
- Promote STEM careers and computational thinking to Iowa K-12 schools
- Your company’s projects can become part of our project based courses

Contact me today to discuss ideas and options for your partnership with us!
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The Computer Science Department at ISU has supported student participation in the ACM Intercollegiate Programming Competition for several years. Our students’ success and interest has grown! In spring 2010 and spring 2012 we sent student teams to the ICPC World Finals, where they competed with teams from universities such as MIT, Stanford, U-Wisconsin Madison, and Harvard, as well as some of the top international universities around the world.

Sponsoring companies can provide financial support for our students to participate in the ACM-ICPC and other programming excellence competitions. Funds will pay for:

- Charter bus to transport students to the ICPC Regionals in Lincoln, Nebraska each fall semester.
- Snacks for the bus ride to Lincoln and back
- Lunch and snacks for practice competitions held on campus each fall, for preparation for the competition
- Minor prizes for practice competition winners
- Air tickets and lodging for our top winning students to attend the world finals competition.
A Computer Science education involves team projects with the goal of giving students real-world experience in project management, software and algorithms design, time management, communication, and teamwork skills. Your company can contribute real-world projects to Computer Science and Software Engineering courses to enhance our students’ experience in project-based classes.

Companies are advised that projects suitable for courses such as the year-long SE 491/492 (Software Engineering Capstone Course) may require specialized software, hardware and/or devices. Complex projects may also require travel funds for students to visit the company site and consult with company employees on project requirements, progress, and implementation. Projects for courses should be proposed well in advance of the semester that work should start. Representatives at your company should work with the faculty in charge of the course to coordinate logistics and requirements in advance as well.

**Project Based Courses**

**CS 309**: Software Development Practices  
**CS/SE 319**: Software Construction & User Interfaces  
**CS/SE 409/509**: Software Requirements Engineering  
**SE 491/492**: Senior Design Project I and II
Companies seeking a traditional route to supporting students can contribute funds to a Computer Science scholarship. As expenses for higher education continue to climb, many students are in need of extra support to continue or finish their study. Companies often meet with scholarship winners and can consider them for an assistantship during the summer, work-study during the academic year, or full-time employment following graduation. Scholarships can be established in the name of the supporting organization, or contributions can be made to the general CS Department scholarship fund.

Organizations can support students who demonstrate characteristics, either academic or personal, that match well with their company culture and goals. Examples of special consideration for scholarship awards include:

- Financial Need
- Minimum GPA
- Junior or Senior undergraduate status
- Preference to Iowa or U.S. residents
- Preference to women and minority students
- Preference to students involved in department or campus organizations, or show leadership potential through their activities
- Undergraduate students engaged in research activities
Students who understand what the IT industry looks like firsthand are more likely to stay in a CS major. Company visits and job-shadowing opportunities are critical to our retention efforts by helping to break many myths that pervade the industry, including that IT employees work alone in cubicles and do nothing but programming, that IT jobs are all outsourced to foreign companies, and that soft skills including communication and presentation skills are not required for success.

Students also need a variety of experiences so that they can decide what kind of company fits best for their life and career goals. The CS department hopes to increase this exposure to freshmen and sophomore students as they are investigating their first summer internships. A company visit or day spent job-shadowing a current employee can make a strong impression!

Companies that currently offer visit days and job shadowing provide funding or make arrangements for:

- transportation for the students and a faculty/staff advisor
- meals for the duration of the visit for participants
- if necessary, overnight accommodation for participants
- Companies can work with the CS department to make arrangements not just with CS students, but students in IT and business majors across campus.
Computational thinking is a critical thinking skill that, according to some, is a required skill for success in the 21st century. For most students, exposure to computational thinking as a problem solving tool comes late, or not at all. The Computer science Department at ISU is making efforts to change this in Iowa K-12 schools with Computational Thinking Workshops and the annual Computational Thinking Competition.

Companies can promote computational thinking by helping fund student workshops and the annual CTC competition. Funding will be spent on:

- **CTC prizes:** Four divisions for the competition each have a 1st, 2nd and 3rd prize for winning projects

- **Lunch at the ISU Union Drive Community Center** is part of the workshop and competition experience; K-12 students enjoy eating lunch with college students!

- **Travel reimbursements for K-12 teachers** to attend either the CT Workshops with students, or for special workshops designed for K-12 teachers to integrate CT components into their classroom teaching (co-sponsored by the Iowa Heartland AEA)

- **Stipends for K-12 teachers** to incentivize attendance at workshops and promote computational thinking in the K-12 classroom
To make your contribution to CS Programs:

Mail a check, payable to the ISU Department of Computer Science to:

**ISU Foundation**

Attn: Kent Studer, Executive Director of Development

PO Box 2230

2505 University Blvd

Ames, IA 50010-2230

Please make note of the program you are interested in contributing to.

To make a contribution electronically, please visit the ISU Foundation website at:

http://www.foundation.iastate.edu

To contact Kent Studer at the ISU Foundation directly:

Phone: 1-800-419-6768

Email: kstuder @foundation.iastate.edu