

Revolutionary technical advancements have transformed business, government and personal communications and information management. However, along with the benefits of this complex interconnection environment, there exist equally profound security challenges.

Computer crime is on the rise, with attackers able to exploit vulnerabilities in computer systems, software and networks, gaining access to important proprietary information, banking, credit, social security, medical and personal data. The cost – to average citizens, government and the corporate world – is immense.

The Center for Information Protection, based at Iowa State University, was established by the National Science Foundation (NSF) to study the problems of security and assurance, and to develop tools and technologies to help companies protect themselves from attackers intent on stealing information or using computers as launching pads for attacking others.

The University of California at Davis is applying to NSF to become a part of this Industry/University Cooperative Research Center (I/UCRC).

Goals of the CIP:

- Assist industry with research and development through industry/faculty research collaborations;
- Improve training and education of employees in information protection;
- Build a repository for all CIP members that contains information protection research results, relevant literature, and other resources that can be shared within the membership;
- Review, improve, and model specific protection architectures tailored to security problems present in critical infrastructure industries;
- Provide a well-trained pool of students.

Example CIP Projects:

- Design forensic models, tools and systems
- Identify and analyze vulnerabilities in AJAX applications; design tools that automate checking and analysis
- Combine static and dynamic analysis of code

- Model policy for change control – exploring effects on site security of changes in policy or technology and how implemented policy differs from intended policy
- Data sanitization and de-identification; balancing need for analysis with privacy policy and threat model
- Develop methods for teaching secure programming and elevating secure code writing abilities

Benefits of Membership in Center for Information Protection

Advisory Board:

- Ability to determine research directions for the Center
- A window to current research in computer security
- Favorable terms for patents and licenses
- Early access to research results and publications
- Opportunity to collaborate with faculty and graduate students
- Cost-effective leveraging of research budgets, with greater access to the research enterprise than otherwise possible
- Opportunities for early recruitment of top computer security graduate students
- Corporate involvement in computer security and academic communities

Advisory Board Membership Fees:

Two levels of membership:

- **Vendor** – companies that work in information protection and computer security, have their own development, or directly benefit from the research
Annual Membership Fee – \$30,000 minimum
- **User** – companies that are end users of information protection and computer security
Annual Membership Fee – \$15,000 minimum

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