PRESS RELEASE

From the University of Illinois Information Trust Institute

Information Trust INSTITUTE

2008 ITI Undergraduate Summer Intern Program Underway

2008 ITI undergraduate interns and advisors at the intern program's May 30 kickoff event.

Nineteen undergraduate students from around the world were selected to receive 2008 summer internships from the Information Trust Institute (ITI) at the University of Illinois, and the program is now underway.

This year marks the second offering of the annual undergraduate research program, which attracted greatly increased interest following the success of last year's inaugural offering. Last year 18 winners were selected from 40 applicants; this year's winners were selected from 94 applications.

The winning students are participating in 8- to 10-week research projects at the University of Illinois at Urbana-Champaign, supervised by ITI researchers in a number of information trust research areas. The awards, which are supported by state and federal funds, include intern stipends and, in some cases, an allocation for travel expenses. This year, faculty mentors participating in the program are from the Illinois departments of Computer Science, Electrical & Computer Engineering, Aerospace Engineering, Mechanical Science & Engineering, and Civil & Environmental Engineering, as well as the National Center for Supercomputing Applications and the Coordinated Science Laboratory.

In addition to working individually with faculty on real-world research projects, interns will attend weekly events at which professors present talks on various relevant topics, such as research ethics and overviews of research work ongoing at Illinois. The summer program will culminate in a poster session at which all of the interns will present the results of their work.

Below is a list of the successful applicants and their faculty mentors.

- **Pooja Agarwal** of the Manipal Institute of Technology, India, will work with Dr. Himanshu Khurana on attribute-based messaging.
- **Igor Andjelkovic** of the University of Belgrade, Serbia, will work with Prof. Darko Marinov on improving the performance of Java PathFinder, a tool for finding violations of safety properties in programs.
- **Aman Bhatia** of IIT-Kanpur, India, will work with Prof. Vikram Adve on designing and implementing compiler algorithms for a parallel programming language.
- **Varsha Chittawar** of IIT-Kharagpur, India, will work with Prof. Ravi Iyer on documenting and supporting a detailed compiler-based error detection technique.
- **Devonne Fowlkes** of Tennessee State University at Nashville will work with Prof. Tim Bretl on problems of trajectory generation and control in support of a project involving an industrial robot arm equipped with a wiper blade to sort and separate hundreds of small objects by pushing.
- **Abhishek Garg** of IIT-Delhi, India, will work with Prof. Ravi Iyer on documenting the current status of development of the NFTAPE fault injection framework and attempting to integrate all independent fault injection techniques developed in his group into the broad NFTAPE framework.
- **Raman Khatri** of IIT-Delhi, India, will work with Prof. Manoj Prabhakaran on reviewing and summarizing literature related to the "cryptutor" wiki.
- **Namho Kim** of the University of Illinois at Urbana-Champaign will work with Prof. Tim Bretl on compiler-analysis support and documentation for neural interfaces for trustworthy control of semi-autonomous robotic systems.
- **Jessa Wang Liying** of the University of Illinois at Urbana-Champaign will work with Dr. Himanshu Khurana on a simplified security key management scheme.
- **Daniel McKenna** of the University of Illinois at Urbana-Champaign will work with Prof. Geir Dullerud on developing a new capability for a distributed robotic testbed, the HoTDeC, so that it can be operated over the web from distributed locations by different simultaneous users.
- **Thomas Nicol** of Taylor University, Upland, Indiana, will work with Prof. Jerry Hajjar on the IT-related operation of the Multi-Axial Full-Scale Substructure Testing and Simulation Facility (MUST-SIM) within the Civil and Environmental Engineering Department.
- **Prateek Patel** of IIT-Kharagpur, India, will work with Prof. Ravi Iyer on implementing a hardware reliability module.
- **Suman Paul** of IIT-Kharagpur, India, will work with Prof. Nikita Borisov on simulation and prototyping of a peer-to-peer anonymous communication system.
- **Mavis Rodrigues** of the University of Illinois at Urbana-Champaign will work with Prof. Todd Coleman on developing iterative inference algorithms using packet timings for network communication/monitoring applications.
- **Komal Shruti** of the National University of Singapore will work with Prof. Michael Loui on studying ethical issues involved in computational research.
- **Mirko Stojmenovic** of the University of Belgrade, Serbia, will work with Prof. Darko Marinov on improving the performance of Java PathFinder, a tool for finding violations of safety properties in programs.
- **Christos Xenophontos** of the University of Illinois at Urbana-Champaign will work with Prof. Yih-Chun Hu on physical layer security for wireless networks, examining certain problems in wireless networks that are best addressed at the physical layer.
- **Shashank Yaduvanshi** of IIT-Delhi, India, will work with Prof. Marianne Winslett to study ways to make use of compliance storage and secure coprocessors to support compliance in relational databases.
- **Felipe Yoshida** of the University of Illinois at Urbana-Champaign will work with Prof. George Gross on the security risk assessment and economics area of grid cyber security.

About the Information Trust Institute (ITI)

The Information Trust Institute is a multidisciplinary cross-campus research unit housed in the College of Engineering at the University of Illinois at Urbana-Champaign. It is an international leader combining research and education with industrial outreach in trustworthy and secure information systems. ITI brings together over 90 faculty, many senior and graduate student researchers, and industry partners to conduct foundational and applied research to enable the creation of critical applications and cyber infrastructures. In doing so, ITI is creating computer systems, software, and networks that society can depend on to be trustworthy, that is, secure, dependable (reliable and available), correct, safe, private, and survivable. Instead of concentrating on narrow and focused technical solutions, ITI aims to create a new paradigm for designing trustworthy systems from the ground up and validating systems that are intended to be trustworthy. www.iti.uiuc.edu

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