The Cyber Security Institute at ORNL is an annual 10-week research initiative in which talented graduate and undergraduate students in computer science, mathematics, and related fields are invited to tackle real-world problems in cyber security. The Institute includes focused introductions to relevant cyber security topics, helping students discover areas of interest. Students work directly with ORNL's cyber security research scientists on ongoing projects that may include, for example, exploiting software and hardware vulnerabilities, modeling and simulation of cyberspace, algorithm development, developing secure technologies, and social network analysis.

The breadth and depth of the cyber security problem space creates complex and rewarding scientific challenges. We invite students who welcome such challenges to apply. The program is interested in helping students learn to contribute to the cyber security research community. Accordingly, students are expected to produce a publication-quality paper and present their findings at the end of the summer.

About ORNL

Oak Ridge National Laboratory is the US Department of Energy's largest science and energy laboratory. ORNL has more than 4,600 staff, and annually hosts approximately 3,000 guest researchers for two weeks or longer. One of ORNL's missions is national security (including cyber security). See the ORNL web pages for more details (http://www.ornl.gov and http://www.csiir.ornl.gov).

Qualifications

The Cyber Security Institute seeks talented and motivated students who are eager to apply their scientific and problem-solving skills to critical problems in cyber security. Students should be prepared to learn new material in intensive coursework offered by ORNL staff. Computer programming skills, oral and written communication skills, and problem solving skills are required.

* Must be a US Citizen and be at least 18 years old
* Must have completed two years of undergraduate education (graduate students may apply)
* Must have a cumulative GPA of 3.0 or higher

How to Apply

Applicants do not apply directly to the Cyber Security Institute, but rather to one or more of the programs that sponsor students at ORNL. These are RAMS, SULI, and HERE. Students in other programs (e.g., DHS cyber interns) are also eligible. Students must also submit a copy of their application materials to the Cyber Security Institute at:

> Erik Ferragut, Ph.D. (ferragutem@ornl.gov)
> Director, Cyber Security Institute
> Oak Ridge National Laboratory
> PO Box 2008 MS6418
> Oak Ridge, TN 37831-6418

Some applicants may be selected for phone interviews or for technical assessment trials prior to selection. Decisions will be made by April 1st where possible.

Program and Web Site	Eligibility	Description	Application Deadline
RAMS http://computing.ornl.gov/internships/rams/	Undergraduate and graduate women and minority students.	An ORNL program for students from under-represented groups.	No later than Feb 1, 2010
SULI http://www.scied.science.doe.gov/SciEd/ERULF/about.html	Any undergraduate or "just graduated" student in science, mathematics, and engineering.	Places students in paid internships in Science and Engineering at any of several Department of Energy facilities. If you apply to SULI you don't need to apply to HERE also.	As late as Apr 1, 2010, but preferably Feb 1, 2010
HERE http://www.orau.gov/hereatornl/	Any undergraduate or graduate student.	An ORNL program for all undergraduate and graduate students. An application to SULI counts as an application to HERE.	No firm deadline, but preferably by Apr 1, 2010
DHS Federal Cyber Service https://www.sfs.opm.gov/	Junior and Senior undergraduates in cyber security at 29 select universities.	A cyber-focused national program administered by DHS. Principal Investigators at the school handle all applications.	Determined by Principal Investigators at your school.