Research Experiences for Undergraduates (REU 2013)

Department of Industrial Engineering
Department of Computer Science
at Texas Tech University
Funded by the National Science Foundation
Grant No. CNS-1263183

Topic: Cybersecurity, Robotics, and Software Engineering

To apply, go to http://www.depts.ttu.edu/cs/research/reu

Program Dates:
June 3 – August 9, 2013

Application Deadline:
March 8, 2013

Notification of Decision:
April 1, 2013

Location:
Texas Tech University
Lubbock, TX

Support for each participant:
a stipend of $5,000;
university residential housing and meal plan;
$600 in travel expenses;

Contact:
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Program Description:
The Texas Tech NSF REU Site program provides the opportunity for undergraduate students to conduct research in cybersecurity, robotics, and software engineering through mentoring that guides students towards becoming independent researchers in a welcoming and enriching environment. Our goal is to influence students to conduct research in the engineering of secure and intelligent software systems and to instill in students the methods and desires to continue with graduate research in these disciplines.

Research Projects:
• Adaptive event stream processing for security in the Smart Grid (Dr. Susan Urban)
• Software specification for cybersecurity (Dr. Joseph Urban)
• Autonomy in human-robot collaboration (Dr. Mohan Sridharan);
• Modeling uncertainty in climate downscaling and irrigation management (Dr. Mohan Sridharan);
• DOROTHY: Design of robot-oriented thinking to help youth (Dr. Mohan Sridharan, Dr. Susan Urban, Dr. Joseph Urban);
• Fault-tolerant robot applications (Dr. Michael Shin);
• Secure software engineering (Dr. Michael Shin);

Eligibility:
• Must be a US citizen or US permanent resident.
• Women and underrepresented minority undergraduate students are encouraged to apply.
• Undergraduate computing degree program or related major/minor with at least one year of courses taken within the program of study.
• Proficient in at least one computer programming language.