Research Experiences for Undergraduates (REU 2012)

Department of Industrial Engineering
Department of Computer Science
at Texas Tech University
Funded by the National Science Foundation
Grant No. CNS-1005212

Topic: **Software Engineering and Service Composition**

To apply, go to [http://www.cs.ttu.edu/reu](http://www.cs.ttu.edu/reu)

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**Program Dates:**
May 29 – August 4, 2012

**Application Deadline:**
March 9, 2012

**Notification of Decision:**
April 2, 2012

**Location:**
Texas Tech University
Lubbock, TX

**Support for each participant:**
a stipend of $5,000;
university residential housing and meal plan;
$500 in travel expenses;

**Contact:**
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**Program Description:**
The development of software and service-oriented systems in a wide variety of application domains can serve as a broad spectrum of means for improving software development.

Research projects include:
- Autonomous robot and adaptive agent software used for robot soccer and human-robot interaction (Dr. Mohan Sridharan);
- Integration of 3D programming with robotics to stimulate interest in computing (Dr. Mohan Sridharan, Dr. Susan Urban, Dr. Joseph Urban);
- Self-managed embedded software systems and secure software engineering (Dr. Michael Shin);
- Software systems for adaptive event stream processing (Dr. Susan Urban);
- Software specification generation based on user input and output (Dr. Joseph Urban);
- Dynamic techniques for service composition and recovery in service-oriented environments (Dr. Susan Urban).

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