

# Research Experiences for Undergraduates in Information Processing and Decision Making for Intelligent and Secure Environments

Summer 2009

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## **Overview:**

Twelve research assistantships are currently available for qualified undergraduate sophomore, junior and senior computer science and engineering students to participate in research in the field of intelligent and secure environments. The program will be conducted at an NSF supported REU Site in the Department of Computer Science and Engineering at the University of Texas at Arlington (UTA). The student participants will investigate problems related to information extraction, model learning, and decision making, in sensor-rich environments for safety and security. These projects will be performed in the larger context of a multi-disciplinary research project, performed under the umbrella of *IRIS* and *MavHome*, aimed at designing control software, as well as hardware resources in an intelligent, sensor-rich environment in order to provide valuable services to the inhabitants and to predict and address threats, to provide support for security, to augment the infrastructure, and for environmental protection. The research will be performed under the supervision of a UTA faculty member and in collaboration with a number of graduate students.

## **Program Schedule and Activities:**

This REU program consists of a 10-week Summer session, from June 1 to August 7, 2009. The student participants are expected to take a 3-credit hour seminar course, as part of this program, during the 2009 Summer session at UTA. Non-UTA students will be required to enroll at UTA as summer students and are encouraged to arrange, through their home institutions, for transfer of these credit hours towards their degree programs. During this program, the students are expected to participate in both individual and team research activities, report on their progress, and attend weekly group meetings.

## **Stipend:**

Each recruited student will receive a stipend of \$4,000 and an additional allowance of \$500 to cover UTA tuition and registration for the Summer course. Students from a University other than UTA will also receive a travel and accommodation supplement of \$700 to compensate for additional travel expenses as well as room and board. Upon acceptance the REU program will supply each student with the necessary documentation to enroll for the summer course and assistance will be available to help in the search for accommodations. The students who drop out of the program, or whose assistantships are terminated due to unsatisfactory performance, will not receive the remainder of their stipend from the point of termination of their research assistantship.

## **Selection Criteria & Application Package:**

Only computer science or computer engineering majors (or those in a closely related field) who are going to be a sophomore, junior, or senior during the 2009-2010 academic year are eligible to participate in the program. Applicants must be U.S. citizens or Permanent Residents. A minimum GPA of 3.0 is required. Talented students, whose GPA is less than (but close to) 3.0 will also be considered. These students are asked to provide a detailed statement explaining the reasons for their current GPA. Interested applicants need to submit a completed application form, a copy of their

current transcript issued by the university, and three letters of recommendation (preferably by the applicant's academic professors and advisors). The applicants will be ranked based on their GPA, academic and extra-curricular accomplishments, experience, courses taken, and recommendation letters. If necessary for the decision, the top twenty finalists will be interviewed, and twelve students will be selected. Women, minorities, or members of any protected class are strongly encouraged to apply.

### **Deadline and Submission Procedure:**

Applications can be submitted electronically by email or using conventional mail. In both cases complete application packages are due at UTA by March 20, 2009.

For electronic submissions recommendation letters should be sent directly by the reference writer to [reu@cse.uta.edu](mailto:reu@cse.uta.edu). All other materials should be sent in one mail to the same address ([reu@cse.uta.edu](mailto:reu@cse.uta.edu)).

For paper applications, please submit your complete application package (including reference letters) to:

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