

# Research Experiences for Undergraduates in Assistive Technologies for People with Disabilities

Summer 2021 (June 10- August 16)

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## **Overview:**

Several research assistantships are currently available for qualified undergraduate sophomore, junior and senior computer science and engineering students (U.S. Citizens and Permanent Residents only) to participate in research in the field of assistive technologies for people with disabilities. 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 (CSE@UTA). In this project, the CSE Department, in partnership with several other departments at UTA, will offer a Research Experience for Undergraduates (REU) program focusing on assistive technologies (AT) for people with disabilities (PWD). The proposed theme encompasses innovative and novel topics that can help PWD meet barriers of different kinds - attitudinal, architectural, and technological - in accessing employment, navigating public spaces, freely communicating, and living independently. During this summer, each student will be working in a multi-disciplinary setting and exposed to innovative and novel inter-disciplinary projects through research and prototyping. The REU participants will work on computer programming, algorithms, sensors, data analytics, machine learning, computer vision, sign language, facial recognition, emotion and behavior analysis, smart care, augmented reality, data analytics, robots, human-machine interaction.

## **Program Schedule and Activities:**

This REU program consists of a 10-week summer session, from June 10 to August 16, 2020. The student participants will have the opportunity to utilize the summer program to gain course credit by enrolling in a 3-credit hour seminar course during the 2020 summer session at UTA. Non-UTA students will be required to enroll at UTA as summer students and are encouraged, if they desire to do so, 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:

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Each recruited student will receive a stipend of \$5,500 and an additional allowance to cover housing costs for 10 weeks, and a limited travel reimbursement if a student is coming from outside the Dallas-Fort Worth area. Upon acceptance the REU program will supply each student with the necessary documentation to enroll and, if so desired, to register for the summer course and assistance will be available to help in the search for accommodations. 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 2021-2022 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 (an unofficial copy is sufficient for the application but an official copy will be required from accepted applicants once they have been selected), and two 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 selected. Women, minorities, or members of any protected class are strongly encouraged to apply.

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

Applications can be submitted electronically on-line or by email, or using conventional mail. In both cases, the application deadline of March 15, 2021.

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

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

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