

Research Experiences for Undergraduates (REU) in Edge Computing



Department of Computer Science
Texas State University

<https://reuec.wp.txstate.edu/>

May 31, 2022 – Aug 5, 2022



In the summer of 2022, this REU site will be organized virtually.

Program Summary

The primary objective of this program is to motivate undergraduate students to pursue research careers and instill in them the spirit of innovation via intensive summer research projects in edge computing. Edge computing is a key to efficiently and affordably realizing the growing internet of things (IoT) and cyber-physical systems (CPS) where tremendous data is generated at the edge of the networks by numerous sensors and end devices. This project will study new trends and enable technologies in edge computing including real-time embedded systems, IoT programming, networks optimization, high-performance computing, and smart wearable devices. The site emphasizes the participation of a diverse group of students, in particular, women, minorities, first-generation and non-traditional students.

Mentors and Topics

Dr. Kecheng Yang	Real-Time Autonomous Driving
Dr. Anne Ngu	Wearable Sensing Systems
Dr. Xiao Chen	Network Resource Allocation
Dr. Tanzima Islam	High-Performance Edge Computing
Dr. Vangelis Metsis	Time-Series Data Labeling

Benefits

- Working on research projects that will advance the state of art in edge computing.
- Improving future career perspectives.
- Learning how to write quality research papers and give research presentations.
- Building a network of supportive community for future graduate career.
- Generous stipend (\$600 per week for 10 weeks).
- Meal allowance (\$140 per week for 10 weeks).
- Housing allowance (\$105 per week for 10 weeks).

Important Dates

Application is Open until All Positions Are Filled.

Review Starts April 1, 2022

Notification Starts April 15, 2022

Program Begins May 31, 2022

Program Ends August 5, 2022

Who can apply

- Applicant must be an undergraduate student of US citizen or US permanent resident.
- High school graduates who have been accepted at an undergraduate institution but who have not yet started their undergraduate study are also eligible to participate.
- Applicant should have at least completed data structures or computer algorithms classes or their equivalence.
- Applicant should be proficient in a programming language.
- Women, minorities and two-year college students are particularly encouraged to apply.

How to apply

Application Materials

- Electronic application form on NSF ETAP.
- An electronic copy of the most recent transcript, including the courses currently being taken in Spring 2022. An unofficial copy of the transcript is sufficient.
- A personal statement — 500 words, include your career goals and the reasons for wanting to do research and participate in this REU program.
- A resume/CV.
- One letter of recommendation from a faculty member who can assess your ability to do research.

Application Submission Instructions

Please apply via NSF ETAP

at <https://www.nsfetap.org/award/201/opportunity/198>.

For more information, please visit the program website

<https://reuec.wp.txstate.edu/>.