Summer 2023
Research and Extension Experience for Undergraduates

NIFA(USDA) REEU Site, College of Engineering, University of Georgia, Athens, GA.
https://engineering.uga.edu/reeu

Modern Tools and Technologies for Food & Agriculture Production

The summer REEU program is an excellent opportunity for undergraduate students to participate in research, extension and outreach projects that focus on innovative tools and modern technologies for agricultural and food production. Students will also get opportunities for professional skills development in communication, leadership, ethics, team work and organization.

Program Overview

- Participants perform research, or outreach projects under the mentorship of a professor at UGA.
- Participate in seminars, career counseling and professional development workshops.
- Students are matched with the professors based on research projects and interests.

Program Site and Locations

The program site is the University of Georgia, both in the main campus at Athens, and in the Griffin Campus. Athens is 75 miles northeast of Atlanta airport. Athens is a vibrant college town, known for its music and culture, and its warm summer weather. Griffin is located about 30 miles south of Atlanta airport.

Financial Support

- Stipend: $3000 total for the program period
- Housing: $1000 total housing allowance or free on-campus housing (for external participants)
- Meals: $500 total for the program period
- Travel : $500 total (for external participants)
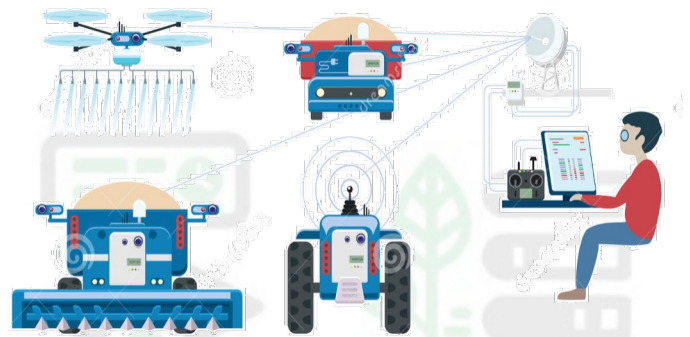
Eligibility

- Sophomore or Junior in 4-year STEM degree
- Cumulative GPA > 3.0
- U.S. Citizen or U.S. Permanent Resident

Key Deadlines

Application Due: March 15, 2023
Notification Date: March 31, 2023
Program Dates: June 1 – July 31, 2023

Student Background

Students majoring in the following disciplines are encouraged to apply : Engineering (Electrical, Computer, Chemical, Agricultural, Biological), Computer Science, Data Science, Agronomy, Chemistry, Microbiology, Molecular Biology, Virology, Biochemistry, Food Science.

Research Projects

Please review the table in the next page for a list of available research projects to choose.

Application

- A link to FULL APPLICATION can be found at: https://engineering.uga.edu/reeu.
- Full applications are due **March 15, 2023** and must include the following:
  - Completed web application (found on webpage)
  - Transcript of STEM major (pdf upload)
  - Recent CV/resume (pdf upload)
  - 2 recommendation letters (pdf upload)
  - Statement of interest 400-500 words (pdf upload)
- Questions? Email: engr-reeu@uga.edu

UNIVERSITY OF GEORGIA

USDA NIFA
United States Department of Agriculture
National Institute of Food and Agriculture

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Available Research Projects

Research Supervisor & Department	Student Background and Degree Major	Research Project Title	Location
Dr. Guoyu Lu **Electrical & Computer Engineering**	Electrical Engineering, Computer Engineering	3D modeling and phenotyping of plants based on mobile phone images.	Athens Campus
Dr. Guoyu Lu **Electrical & Computer Engineering**	Electrical Engineering, Computer Engineering	UAV-based crop field modeling and yield prediction.	Athens Campus
Dr. Kyle Johnsen **Computer Engineering**	Computer Engineering, Computer Science	Augmented reality visualization of point cloud datasets.	Athens Campus
Dr. Jin Ye **Electrical Engineering**	Electrical Engineering, Computer Engineering	Renewable energy systems for controlled environment agriculture.	Athens Campus
Dr. WenZhan Song **Computer Engineering**	Computer Engineering, Computer Science	Build a sensor web for monitoring poultry house.	Athens Campus
Dr. Leonardo Bastos **Crop & Soil Science**	Agricultural Engineering, Agronomy, Computer Science, Data Science	Developing an online dashboard tool for recommending cotton varieties.	Athens Campus
Dr. Leonardo Bastos **Crop & Soil Science**	Agricultural Engineering, Agronomy, Computer Science, Data Science	State-wide weather data interpolation for digital agriculture application.	Athens Campus
Dr. Ramaraja Ramasamy **Chemical & Biological Engineering**	Microbiology, Biochemistry, Biological Engineering	Development of biosensors for pathogen diagnostics and detection.	Athens Campus
Dr. Malak Esseili **Food Science and Technology**	Food Science, Microbiology, Virology, Molecular Biology	Development of low-cost filtration systems for waterborne viruses.	Griffin Campus
Dr. Malak Esseili **Food Science and Technology**	Food Science, Microbiology, Virology, Molecular Biology	Identification of natural inhibitors for foodborne viruses.	Griffin Campus
Dr. Govindaraj Devkumar **Food Science and Technology**	Biology, Biochemistry, Microbiology, Plant Science, Food Science	Survey of peach packing houses for microbial contamination.	Griffin Campus
Dr. Francisco Diez-Gonzalez **Food Science and Technology**	Microbiology, Biochemistry, Food Science	Development of anti-microbial treatments to inhibit mold growth in food.	Griffin Campus

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