

May 11, 2022

Graduate Research Assistantships

The Department of Biosystems Engineering (BSEN) at Auburn University is seeking applications for several M.S. and Ph.D. Graduate Research Assistant positions to conduct innovative research in cyber-physical systems for agriculture and forestry. The positions can start as early as Fall 2022.

Responsibilities: The successful candidates will be responsible for fulfilling the degree requirements of the Biosystems Engineering M.S./Ph.D. program, and conduct research in a timely manner. The successful candidates will focus on one of the following projects:

- Forest tree seedling inventory using computer vision, machine/deep learning (ML/DL) and robotics.
- Vegetation cover and species assessment at construction sites using UAV remote sensing and ML/DL.
- Prediction and forecasting of harmful algal bloom using satellite remote sensing and ML/DL.

Qualifications: The candidates should have:

- An earned B.S. in Biosystems/Biological/Agricultural Engineering, Mechanical Engineering, Computer Engineering, Electrical Engineering, or closely related engineering disciplines by the expected start date.
- Sufficient credentials:
 - GPA > 3.0; GRE test scores;
 - TOEFL > 79 with each subcomponent > 16 or IELTS > 6.5 for international students.
- Strong oral and written communication skills.
- Experience in one or more of the following areas:
 - programming (Python, C/C++, Matlab);
 - circuit design, instrumentation, and embedded systems;
 - satellite and UAV remote sensing, photogrammetry, and GIS;
 - imaging (RGB, multispectral, hyperspectral, thermal);
 - computer vision, machine learning, and deep learning;
 - robotics and Robot Operating System (ROS);
 - 3D design (SolidWorks, Inventor, AutoCAD) and 3D printing.

Salary: The successful candidate will receive a monthly stipend, a tuition waiver, and health insurance.

Application: Please email a CV and copies of test scores and transcripts to Dr. Yin Bao at yzb0016@auburn.edu