

Research Project: **3D Modeling and Phenotyping of Plants Based on Mobile Phone Images**
Faculty Mentor: Dr. Lu, School of Electrical and Computer Engineering (guoyu.lu@uga.edu)
Area of Expertise: Artificial Intelligence, Agriculture infrastructure.
Student Background: Electrical Engineering, Computer Science & Engineering, Agriculture.
Faculty Website: <https://engineering.uga.edu/people/profile/guoyu-lu-ph.d>



Dr. Lu is looking for REEU students with background in electrical or computer engineering and interest in artificial intelligence, machine learning, image processing, and agriculture to work on a summer project that will focus on developing mobile AI system to build 3D plant models and assess the plant traits. REEU students will work with Dr. Lu and his PhD students. Undergraduate students will also participate in weekly research meetings with graduate students and will be exposed to other areas of research in Dr. Lu's laboratory including computer vision, robotics, autonomous driving, etc. Dr. Lu's lab has multiple drone and ground robotics platforms and various sensors. Students will have the opportunity to apply AI technologies to build impactful agriculture infrastructure.

Research Project: **UAV-based Crop Field Modeling and Yield Prediction**
Faculty Mentor: Dr. Lu, School of Electrical and Computer Engineering (guoyu.lu@uga.edu)
Area of Expertise: Artificial Intelligence, Agriculture infrastructure.
Student Background: Electrical Engineering, Computer Science & Engineering, Agriculture.
Faculty Website: <https://engineering.uga.edu/people/profile/guoyu-lu-ph.d>



Dr. Lu is looking for REEU students with background in electrical or computer engineering and interest in artificial intelligence, machine learning, image processing, and agriculture to work on a summer project that will focus on developing UAS AI sensing system for 3D crop structure assessment. REEU students will work with Dr. Lu and his PhD students. Undergraduate students will also participate in weekly research meetings with graduate students and will be exposed to other areas of research in Dr. Lu's laboratory including computer vision, robotics, autonomous driving, etc. Dr. Lu's lab has multiple drone and ground robotics platforms and various sensors. Students will have the opportunity to apply AI technologies to build impactful agriculture infrastructure.