



Ph.D. Research Assistantships in Agricultural Robotics, Sensing, and AI

The Bio-Sensing, Automation, and Intelligence Laboratory (B-SAIL) in the Department of Agricultural and Biological Engineering at the University of Florida is seeking highly motivated Ph.D. students for research assistantship positions in agricultural robotics, sensing, automation, and artificial intelligence.

Applications are currently being accepted and will be reviewed on a rolling basis.

The University of Florida is a leading public research university, and the graduate program in the Department of Agricultural and Biological Engineering is ranked among the top programs nationally by *U.S. News & World Report*. B-SAIL focuses on developing innovative AI, sensing, and robotic technologies for agricultural and food systems. The lab is supported by research grants from federal agencies, including NSF, USDA NIFA, and EPA, as well as industry partners.

The available Ph.D. research assistantships are expected to support projects in field robotics, robotic manipulation, advanced computer vision, deep learning, high-throughput plant phenotyping, robotic harvesting, postharvest inspection, precision agriculture, controlled environment agriculture, and environmental sensing.

Current research opportunities include:

- IoT sensor systems and digital twin development for controlled environment agriculture (*Supported by NSF/USDA NIFA CPS funding*)
- Robotic pollination system development (*Supported by a doctoral fellowship*)
- Real-time multispectral imaging for fruit postharvest inspection (*Supported by a USDA NIFA SCRI grant*)
- Robotic harvesting system for specialty crops (*Supported by a doctoral fellowship*)
- UAV-based remote sensing and machine learning for harmful algal bloom monitoring (*Supported by an EPA grant*)

Successful candidates should have strong research interests and relevant experience in one or more of the following areas:

- Computer vision
- Machine learning and deep learning
- Robotics, mechatronics, unmanned aerial vehicles
- Electronics and embedded systems

- Agricultural sensing and automation
- Remote sensing and imaging systems

Strong programming skills are expected. Experience with one or more of the following languages or platforms is desirable: Python, MATLAB, C/C++, LabVIEW, or Java.

Prior research experience, peer-reviewed publications, strong communication skills, and a demonstrated willingness to learn new technologies are desirable.

Interested applicants should send a curriculum vitae, transcripts, and a brief statement of research interests to:

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