



Postdoctoral Position: In-Orchard Automation

A postdoctoral research associate position is available in <u>Dr. Yuzhen Lu</u>'s group (**AgFood Sensing & Intelligence**) in the Department of Biosystems & Agricultural Engineering at Michigan State University (<u>Top 100 Globally, Public Ivy</u>, the first Land-Grant University and <u>AAU</u> member in the U.S., <u>Top 15 in Agriculture & Forestry</u> globally). The selected candidate will work primarily on **in-chard automation** for specialty crops. This position will be an initial 12-month opportunity with the possibility of an extension for 3 years. It may start in December of 2023 or on a later agreed-upon starting date of 2024.

The successful candidate is expected to assist with leading research efforts in leveraging advanced sensing, machine vision, and artificial intelligence (AI)/robotics technologies to automate otherwise labor-intensive in-orchard tasks (e.g., fruit pre-sorting, harvesting, crop management), and to generate high-quality peer-reviewed publications. The postdoc will meet regularly with Dr. Lu to discuss best practices in experiments, manuscript preparation, and mentoring. The selected candidate may also engage in activities such as grant proposal development and class teaching as needed for their professional development. Successful candidates need to be <u>creative, self-motivated, adaptive, dedicated</u>, collaborate in multidisciplinary environments, and communicate research outcomes actively through journal publications and deliver presentations at conferences.

Minimum Requirements

- The successful candidate must have a PhD degree in Biosystems/Agricultural Engineering, Computer Science, Electrical Engineering, Mechanical Engineering, or closely related fields.
- Successful candidates are expected to have demonstrated research experience evidenced in peer-reviewed publication records in computer vision, mechatronics, and or AI/robotics.
- Strong computer programming skills are necessary in C++, Python, and or Matlab.
- The candidate is expected to have excellent scientific writing and communication skills.

Desired Qualifications

- Engineering skills in design, prototyping, and integration are desirable.
- Prior experience in the development of real-time machine/computer vision systems for specialty crop automation is an advantage.

Application

Please refer to the Posting #904858 on the MSU website: <u>https://careers.msu.edu/en-us/job/516534/research-associatefixed-term</u>, for formal application. Correspondences about the position may be sent to Dr. Yuzhen Lu at <u>luyuzhen@msu.edu</u>. Review of applications will commence on 11/15/2023 and proceed until the position is filled. Video pre-interview meetings may be scheduled for potential candidates if necessary.

