MICHIGAN STATE UNIVERSITY
Biosystems & Agricultural Engineering (BAE)

Graduate Assistantships (M.S./Ph.D.)
Biosystems Engineering, Fall 2023/Spring 2024

POSITION

Michigan State University (MSU, Top 100 Globally, Public Ivy, the first Land-Grant University and AAU member in the U.S.) is inviting applications for M.S./Ph.D. research assistantships in **Biosystems Engineering** (https://www.egr.msu.edu/bae/). The assistantship covers tuition and insurance and provides competitive stipends and will be renewed annually. The students will work with Dr. Yuzhen Lu, on original research at the intersection of **non-destructive sensing, automation/robotics, and artificial intelligence (AI) for smart agriculture-food systems**. Potential research topics include but are not limited to optical imaging for online grading/sorting of agricultural commodities, machine/computer vision and robotics for specialty crop management, phenotyping, and harvesting, and AI in confined production systems. Successful candidates need to be *creative, self-motivated, adaptive, focused*, and can collaborate in multidisciplinary environments. The students will be expected to communicate research outcomes actively and in time through high-quality, peer-reviewed publications and deliver presentations at conferences.

REQUIRED

- B.S./M.S. degree in Ag/Biosystems Engineering, Electrical Engineering, Mechatronics, Automation, Computer Science/Engineering, Optics, or other related fields, with a GPA of 3.3 or higher.
- Proficiency in *computer programming* (e.g., Python, C++/C, Qt, Matlab).
- Experience in *image processing/analysis*, *computer vision*, *machine learning*, or *robotics*.
- Experience in *engineering design* (e.g., Solidworks) and *prototyping*, and *software-hardware integration*.
- Demonstrated research abilities and *scientific writing skills* through *peer-reviewed publications*.
- Students with non-English credentials must obtain a valid TOEFL score of iBT 80+ or IELTS score of 6.5 or higher (see https://grad.msu.edu/english-language-competency) as well as a score.

PREFERED

- Publications in ***real-time machine vision systems*** for postharvest processing/production agriculture.

APPLICATION

If interested in this position, please contact Dr. Yuzhen Lu with a description of how you meet the qualifications. A full application for an official offer to be made should include *a cover letter describing the applicant's research interest, a CV, transcripts, test score(s), journal publications, and a list of three references including names, email, address, and telephone number*. Review will begin immediately and continue until positions are filled. Video interviews will be requested for potential candidates. Successful applicants will need to apply to the MSU Graduate School. Please visit https://grad.msu.edu/apply and https://www.egr.msu.edu/bae/graduate/application-instructions for details.

CONTACT

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