MICHIGAN STATE UNIVERSITY
Biosystems & Agricultural Engineering (BAE)

Graduate Assistantships
Biosystems Engineering, 2025 Spring/Summer/Fall

POSITION

Michigan State University (Top 100 Globally, Public Ivy, the first Land-Grant University and AAU member in the U.S., Top 15 in Agriculture & Forestry worldwide) is inviting applications for Ph.D. (or M.S.) 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 and development at the intersection of **machine vision or optical sensing, automation/robotics, and artificial intelligence (AI) for smart agriculture-food systems**. Potential topics include online automated grading/sorting of agricultural commodities, machine/computer vision and robotics for specialty crop management, phenotyping, and harvesting, and AI in confined agricultural production systems. Successful candidates need to be *creative, self-motivated, adaptive, focused*, and 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), *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 GRE score (required!).

PREFERED

- First-authored publications in ***imaging technology*** for production agriculture/postharvest processing.

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), 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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