



Graduate Assistantship (M.S./Ph.D.) Available in Biosystems Engineering, Spring/Fall 2023

POSITION

Michigan State University (<u>Top 100 Globally</u>, <u>Public Ivy</u>, the very first Land-grant University and <u>AAU</u> member in the U.S.) is inviting applications for M.S./Ph.D. level Graduate Research Assistantship (GRA) in the Department of Biosystems & Agricultural Engineering (https://www.egr.msu.edu/bae/). The GRA covers tuition and insurance and provides competitive stipends and will be renewed annually. The student will work, under the supervision of <u>Dr. Yuzhen Lu</u>, on original research broadly within the multidisciplinary field of non-destructive sensing, instrumentation, automation/robotics, and advanced data analytics for smart agriculture-food systems. Potential research topics include but are not limited to imaging and spectroscopy for quality detection and sorting of agricultural products, machine vision and robotics for specialty crop management, phenotyping, and harvesting, and artificial intelligence and internet of things in plant/animal production. The successful candidates need to be creative, self-motivated, and adaptive, and can collaborate in a multidisciplinary environment. The students will be expected to communicate research results actively through peer-reviewed publications and deliver presentations at conferences.

QUALIFICATIONS

- B.S./M.S. degree in *Agricultural or 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, Matlab, C++/C, Qt)
- Experience in **image processing/analysis**, **computer vision**, **machine learning** (e.g., PyTorch, TensorFlow), or **robotics**
- Experience in engineering design (e.g., Solidworks), prototyping, software-hardware integration
- Demonstrated research abilities and **scientific writing skills** (e.g., peer-reviewed journal publications)
- Students with non-English credentials must obtain a TOEFL score of iBT 80+ or IELTS score of 6.5 or higher (https://grad.msu.edu/english-language-competency) and have a GRE score (currently optional)

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 (if any), 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 Graduate School of Michigan State University. Please visit https://grad.msu.edu/apply and https://grad.msu.edu/apply and https://www.egr.msu.edu/bae/graduate/application-instructions for details.

CONTACT

Yuzhen Lu, Ph.D., Assistant Professor

(Currently) Department of Agricultural & Biological Engineering, Mississippi State University (Starting on 1/1/2023) Department of Biosystems & Agricultural Engineering, Michigan State University *Email:* luyuzhen@msu.edu | yzlu@abe.msstate.edu; *Phone*: (662) 325-7345; *URL*: https://www.yuzhenlu.com/