



PhD and MSc openings at the University of Manitoba

Position Description

Two graduate research opportunities (one PhD and one MSc) are available at [Dr. Jiating Li's lab](#) at the [Department of Biosystems Engineering, University of Manitoba](#). My lab specializes in digital technologies for agri-food systems, with a keen focus on proximal and remote sensing, optical sensors, robotics and automation systems, Internet-of-Things, Artificial Intelligence, and process-based models.

Successful candidates will develop ground- or aerial-based sensing and analysis systems for the qualitative and quantitative assessment of crop stress. The MSc student will receive a minimum stipend of CA\$21,000 per year, and the PhD student will receive a minimum stipend of CA\$24,000 per year. Anticipated start dates are Jan. 2025 (MSc) and May/Sep. 2025 (PhD).

Minimum Qualifications

- Qualified applicants must have earned a bachelor's or master's degree in Agricultural and Biological Engineering, Biological Systems or Biosystems Engineering, Computer Science, Mechanical/Electrical Engineering, or other related fields.
- Meet the [minimum admission and English language proficiency requirements of the Faculty of Graduate Studies](#).
- The ideal candidate should be highly self-motivated and willing to collaborate in a multidisciplinary environment.

Preferred Qualifications

- Programming skills in Python, R, Matlab, C++, etc.
- Machine and deep learning.
- Process-based modeling (e.g., radiative transfer model, crop growth model).
- Remote sensing (e.g., UAV, satellite, optical sensing, 2D/3D image processing).
- Mechatronics and robotics (e.g., mechanical design, Robot Operating System).
- Records of previous scientific publications.

If you are interested in these positions, please email Dr. Jiating Li (jtlicina@hotmail.com) with a statement of intent (2-page maximum), Curriculum Vitae, and copies of all post-secondary transcripts. Review of applications will begin immediately until positions are filled.



To learn more about my research:

umanitoba.ca/engineering/biosystems