Haozhou Wang ( )

Project Research Assistant, Laboratory of Field Phenomics,
Graduate School of Agricultural and Life Sciences, The University of Tokyo.

haozhou-wang@outlook.com haozhou.wang HowcanoeWang 365 citations, h-index 8

Research Interests

- High-throughput plant 3D phenotyping.
- Digital twin virtual plant model and multi-sensory data fusion.
- Open-source agricultural phenotyping tool and dataset development.

Featured Projects and Publications

3DPotatoTwin dataset *huggingface dataset*

Dataset intended to help train and benchmark multi-sensory fusion and shape completion algorithms specifically for applications involving actual potato tuber harvesting.

- **wang_3dpotatotwin_2025**
- **Citations**: 0; **Reported** by

Broccoli harvest date prediction application *github repo*

A demonstrable application of aerial phenotyping technology to assist farmers in optimizing financial returns and minimizing food waste.

- **wang_dronebased_2023**
- **Citations**: 21; **Reported** by EurekAlert!, , and

EasyIDP intermediate data processing tool *github repo*

A handy tool for dealing with region of interest (ROI) on the image reconstruction (Metashape & Pix4D) outputs, mainly in agriculture applications.

- **wang_easyidp_2021**.
- **Citations**: 40; **Github stars**: 47; **Tools Used**: Python, PyPi, Readthedocs;

UAV-HiRAP data processing platform *uav-hirap.org*

An open-source and web-based platform which provides service for image classification.

- **wang_landscape_2019**
- **Citations**: 45; **Tools Used**: Python, Flask, Bootstrap, Nginx;

Professional Positions

Project Research Assistant *Tokyo, Japan*
The University of Tokyo *Oct. 2023 –present*

- Aerial sensing system for detecting abnormal potatoes and guiding in-field positioning.
- A 3D paired potato tuber dataset for close-range multi-sensor data fusion.
- Integration of Metashape stag-markers for occlusion-tolerant high-quality in-field reconstruction.
- Structural modeling and growth prediction framework for 3D virtual plants and digital twin.

Education

The University of Tokyo *Oct. 2020 –Sept. 2023*
Doctor in Agricultural Science

Thesis title: Studies on 3D-based plant phenotyping by multi-scale data fusion.

The University of New Brunswick *Sept. 2017 –Dec. 2019*
Master of Science in Forestry

Thesis title: Estimating Forest Attributes from Spherical Images.

The Nanjing Forestry University *Sept. 2013 –Jun. 2017*
Bachelor of Science in Ecology

Thesis title: Extracting DBH Measurements from RGB Photo Images.

Publications

Book Chapters (0 entries)
Patent (0 entries)
Journal articles (0 entries)
Conference proceedings (0 entries)

Awards

The 6th CIGR international conference young researcher travel award.	*May 2024*
The 12th JSAI ( ) young researcher innovation award.	*May 2021*
The third prize of the 8th Liang Xi youth paper award ( ).	*Nov 2020*
The first place for oral presentation on 25th UNB GSA Conference.	*May 2018*