

Purdue University Institute for Plant Sciences looks for an inspired, energetic PostDoc to join the plant phenotyping facilities at Purdue University.

Available: NOW

Location: Controlled Environment Phenotyping Facility, West Lafayette, IN

The responsibilities of the position

- Coordinating the development of software data pipelines in high-throughput plant phenotyping and big data analysis that enable the operation of current and future imaging and sensing systems in Purdue's phenotyping facilities
- Developing image analysis and machine vision algorithms to create critical and novel traits which facilitate the quantification of physiological processes of various plants, and the assessment of plant tolerance to various biotic and abiotic stress
- Developing data management protocols and systems that are capable of handling data of large volumes and different varieties, and providing easy access by way of a graphical user interface (GUI) and standard application programming interface (API)
- Collaborating with plant phenotyping facility managers to coordinate the operation of the facilities, especially the operation of various imaging systems and platforms, such as RGB, hyperspectral, X-ray imaging system and UAV-based imaging systems
- Providing technical supports, guidance, coaching and training in image analysis to customers and partners. Communicate results to key stakeholders
- Leading and working in projects with academic and industry partners. Contributing to implementation and application of novel machine learning methodologies in plant phenotyping

Required qualifications

- Ph.D. degree in Agricultural and Biosystem engineering, computer/electronic engineering, information technology, computational biology and other relevant background or proven hand-on experience in image analysis and machine vision
- Knowledge and experience in multiple programming languages and platforms (e.g. Python, C/C++, Fortran, Matlab, PlantCV, ImageJ)
- Excellent communication and collaboration skills to work with plant biologists, IT support team, engineers and algorithm developers

Preferred qualifications

- Familiar with manipulating georeferenced imagery and/or remote sensing image processing
- Strong knowledge and experience in data management, specifically in the database applications, complex web applications, and storage technologies

Salary and Benefits: Salary commensurate with experience. Fringe benefits also provided.

Application Procedure: Qualified persons are requested to send a letter of application including a 1-page (maximum) statement of research goals, and a curriculum vitae as electronic PDFs along with email addresses for three references, and 1 representative example of their scholarly work to:

Dr. Yang Yang, Director of Digital Phenomics
Mann Hall, Room 154C
203 Martin Jischke Drive
Purdue University
West Lafayette, IN 47907
Yang1527@purdue.edu

Purdue Institute for Plant Sciences information is available at:

<https://ag.purdue.edu/plantsciences/>

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.