

## General Description of Position:

The plant disease epidemiology and field crop pathology lab at Purdue University, led by Dr. C. D. Cruz, has an immediate opening and is seeking to hire a **Postdoctoral researcher**. The position is for one year, with the possibility of extension for another 1-2 years. We are searching for an outstanding individual to work on plant disease phenotyping and big data analysis.



Dr. Cruz collaborates with a multidisciplinary group of scientists working at the intersection of quantitative epidemiology, crop protection, crop physiology, engineering, computational biology, remote sensing, machine learning, image processing, and sensor-based technology. The vision of our group is to develop useful epidemiological tools to help producers become more productive, efficient, and environmentally sustainable. The selected candidate will join a dynamic, interdisciplinary team focused on developing next generation digital epidemiology tools. The mission is to scientifically support phenotyping activities, and to provide expertise with the ultimate goal to develop simulation, disease risk, or prediction models in collaboration with the epidemiologist and other collaborators. The successful candidate is expected to lead the preparation and publication of peer-reviewed manuscripts associated with the project.

## Required Minimum Qualifications:

- Ph.D. in geospatial science, agronomy or closely related discipline with experience in quantitative analysis
- Self-directed research planning and execution
- Experience in image processing and geospatial data analysis for agricultural projects
- Experience in precision-agriculture technologies and remote-sensing software and advanced sensors
- Experience with field experiments
- Positive “can do” attitude and proactive flexible leadership style driven by vision, passion and persistence
- Excellent oral and written English communication skills, and ability to work in a team-based, multicultural, collaborative environment
- Proven publication record

## Preferred Qualifications:

- Strong programming (Python/R) and big data management skills
- Experience with UAS (Unmanned Aircraft System) based high-throughput phenotyping
- Keen interest in deep learning, computer vision, image analysis, and/or pattern recognition.

## Special Instructions to Applicants:

Send a cover letter indicating what makes you a good fit for this job, C.V., and name and contact information for three references to [cd-cruz@purdue.edu](mailto:cd-cruz@purdue.edu)