Graduate Research Associate Positions: Remote Sensing and Data Analytics for Sustainable Agriculture

The AgSensing Lab (ASL) in the Department of Food, Agricultural and Biological Engineering at the Ohio State University is recruiting 1 MS and 1 PhD students starting in Spring or Fall of 2021 to work in the areas of remote sensing and data analytics for sustainable agriculture.

The ASL focuses on understanding the role of agricultural practices on ecosystem services (such as crop and soil health) at the field and landscape scales, using remote sensing (i.e., satellite and drone) technologies, ecosystem models and machine learning methods. Some of the current research projects include (1) crop yield assessment at a field scale; (2) mapping of cover crops and the impact on water quality and greenhouse gas emissions, (3) application of drone technologies for precision agriculture, and (4) satellite based monitoring of harmful algal blooms. ASL also closely collaborates with other research groups, such as ReRout Lab, Lab for Environmental Modeling and Spatial Analysis, BSAL, and Digital Ag at the Ohio State University.

Selected graduate students will work on projects that involve interdisciplinary team of researchers from various disciplines, such as agricultural engineering, computer science and electrical engineering, horticulture and crop science, and entomology. The students will also have an opportunity to work with farmers, crop consultants, and precision agriculture industries. Graduate students are expected to publish research findings in international peer-reviewed journals, present research findings in conferences/meetings, and generate regular project update reports.

The ideal candidates should have the following qualifications and experiences:

- BS or MS degree in agricultural, mechanical, civil, or electrical engineering; environmental science; computer science; or other related disciplines.
- Demonstrated statistical and computer-programming (Python, R, OpenCV, MATLAB, C++, etc.) skills.
- Experience in remote sensing, GIS, ecosystem modeling, precision agriculture technologies.
- Ability to learn/adopt skills and knowledge in solving “real-world” problems.
- Creative and independent research abilities with teamwork spirit.
- Strong oral and written communications skills.

Salary and Benefits: Starting salary/stipend will be competitive. The position will include full benefits as per OSU guidelines, including tuition and health care benefits.

Anticipated Starting Term: Spring 2020 (Open until filled). Applications will be reviewed as received.

How to Apply: Please email the following materials to Dr. Sami Khanal (khanal.3@osu.edu):

- Cover letter outlining (a) research experience, and interest, (b) motivations to pursue graduate studies, (c) and long-term career goals
- Detailed CV
- Academic transcripts (unofficial copies at this point)
- Unofficial GRE and TOEFL (only for international students) test scores
- List of three references (name, position, institution, email address, and phone number).