

**Graduate Research Assistantship Announcement**

Phenomics Lab, Department of Biological Systems Engineering, Washington State University is seeking candidates for research assistantships for a Ph.D. program in Biological and Agricultural Engineering.

Phenomics Lab (<https://labs.wsu.edu/sankaran-phenomics/>) works on the interface of Science and Engineering with a major focus towards developing applications of sensors and platforms in agriculture. The research team utilizes sensing technologies to assess several plant traits associated with crop performance under both controlled environment and field conditions. Technologies under evaluation include optical (e.g., hyperspectral, thermal imaging, LiDAR) and chemical (ion mobility spectrometry) sensors, unmanned aerial systems/drones, automated phenotyping systems, etc. Besides sensing/imaging and automation, the research team also utilizes mechatronics for sensing system development, plant sciences for understanding crop physiology and associating sensing data with crop performances, and image processing and machine learning for big data analytics. The goal of Phenomics Lab is to provide technology-driven tools to support plant breeding, crop research, and precision agriculture.

We are looking for highly motivated, organized, and experienced students, potentially with relevant research experience before applying to graduate school. The student will have an opportunity to conduct high-level interdisciplinary research that will directly contribute to the development of tools and technologies that support crop improvement studies. Successful candidates are expected to develop and manage their research projects, utilize data analytics tools for data mining, and present findings at scientific meetings. Publication of relevant findings in peer-reviewed sources will be expected. The student will have excellent opportunities to work in a multidisciplinary team on advanced sensing technologies for crop evaluation to develop a successful career in academics or agriculture-based companies.

**Desired Qualifications:** M.S. in Agricultural Engineering, Biomedical Engineering, Engineering Science, or related field from an accredited institution. Prior experience on sensor systems and instrumentation, a strong background in computing and programming in Python, R or Matlab, statistical methods and machine learning techniques, excellent communication skills (oral and written), highly-motivated, ability to critically think and problem solve, and ability to work in a multidisciplinary team.

**Assistantship:** The assistantship provides tuition, monthly stipend, and health insurance as per the policies established by Washington State University.

**Start Date:** Assistantship is available from Fall, 2020.

For details, please contact **Dr. Sindhuja Sankaran**; Phone: 509-335-8828; E-mail: [sindhuja.sankaran@wsu.edu](mailto:sindhuja.sankaran@wsu.edu). Please send a letter of interest, curriculum vitae, and names of three references during your contact.