FACULTY POSITION IN AGRICULTURAL AND BIOLOGICAL ENGINEERING

Digital agriculture is a part of the Fourth Industrial Revolution in which physical and biological worlds become fused through digital technologies related to computation and communication. There are opportunities to improve efficiency, quality, and sustainability in many agricultural processes through a continuum from sensing of data, to the handling and analysis of the data, ending with action on this information (then with feedback through a cycle). This position is one of six that will be hired by the Purdue University College of Agriculture over the next two years as part of a cluster hire to leverage existing strengths in digital agriculture. These hires, expected in Agricultural & Biological Engineering, Agricultural Economics, and Agronomy, will complement digital agriculture strengths in these programs as well as those in Botany & Plant Pathology, Entomology, and Horticulture.

POSITION: Assistant Professor of Agricultural and Biological Engineering, 9-month tenure track (possibility of courtesy appointments in other areas such as Electrical and Computer Engineering)

RESPONSIBILITIES The successful candidate is expected to work and collaborate effectively with other faculty in a highly interdisciplinary effort to address digital agriculture discovery and learning needs. The individual will engage local, state, national and international government, and non-government agencies, industry, and other stakeholders, and contribute to Purdue’s research and teaching efforts focused largely on digital agriculture data handling/analysis.

Research areas may include:
- application of cyber-physical systems for improved logistics, sustainability, or product quality improvement
- design of improved processes and decision tools using computational strategies and data streaming
- application of machine learning adapted from other industries that bring productivity and sustainability improvements to agriculture
- engineering of solutions that address data quality and security
- data architectures, ontologies, and ownership of data
- cultivation of an open-source culture for rapid innovation
- involvement in data standards and annotation automation

Teaching in related subject matter for upper division and/or graduate-level Agricultural Systems Management and/or Agricultural Engineering majors is expected. The individual will also develop a successful externally funded research program.

This is an academic year, tenure track, research and teaching position. The successful candidate will build a renowned program in this area that is inclusive of an international dimension.

QUALIFICATIONS: Applicants must have a Ph.D. degree in agricultural engineering, agricultural systems management, computer engineering, computer science or a related discipline. Excellent communication and grant writing skills are required.

THE COLLEGES: The Department is part of the Colleges of Agriculture and Engineering at Purdue University that are deeply committed to the three land-grant missions (teaching, research, and extension), to international activities and perspectives that span all missions, and to excellence in all we do. The College of Agriculture is one of the world’s leading colleges of agricultural, food, life, and natural
resource sciences and ranked eighth globally in the 2016 QS World University Rankings. The College has 11 academic departments and includes 325 faculty, 2736 undergraduate students, and 699 graduate students. The College of Engineering has 13 academic units and includes 456 faculty, more than 8700 undergraduate students, and nearly 3,500 graduate students. The College of Engineering is ranked number 9 for undergraduate programs and number 6 for graduate programs by U.S. News and World Report. The Colleges’ strategic plans can be accessed at https://ag.purdue.edu/plan/Pages/default.aspx and https://engineering.purdue.edu/Engr/AboutUs/StrategicPlan/2009-2014.

The Department and Colleges are committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in their cover letter, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. Purdue is an ADVANCE institution – www.purdue.edu/dp/advance.

A background check is required for employment in this position.

OPPORTUNITIES FOR COLLABORATION: Numerous opportunities for collaborations throughout Purdue University exist. The Purdue Moves Plant Science Initiative is a major investment in plant production and utilization that presents opportunities for collaboration (https://ag.purdue.edu/Pages/PlantSciencesInitiative.aspx). Collaborators may be found in Discovery Park (http://www.purdue.edu/discoverypark), Purdue Agricultural Centers, Center for Commercial Agriculture, Site-Specific Management Center, Center for Food and Agricultural Business, Crop Diagnostics Research & Training Center, and Laboratory for Applications of Remote Sensing.

CLOSING DATE FOR APPLICATIONS: Review of applications will begin November 15, 2017 and will continue until the position is filled.

APPLICATION MATERIALS: Letter of interest, resume, official academic transcripts, statement of teaching and research philosophies, and names, addresses and phone numbers of three references. Applications should be submitted electronically to abejob@ecn.purdue.edu. A background check is required for employment in this position.

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CONTACT: Address inquiries to: Dr. Dennis Buckmaster, Department of Agricultural & Biological Engineering, Purdue University. dbuckmas@purdue.edu; 765/496-9512.

For additional information see http://www.purdue.edu/ABE

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