Department of
BIOPRODUCTS AND
BIOSYSTEMS ENGINEERING

UNIVERSITY OF MINNESOTA
Driven to Discover℠

Assistant Professor
Measurement Science and Agro-Bioinformatics
Department of Bioproducts and Biosystems Engineering
College of Food, Agricultural and Natural Resource Sciences
University of Minnesota

There is an important need to develop data-driven solutions for addressing complex problems facing agriculture. With its central motivation to improve agricultural efficiency and contribute to this need, Minnesota's AGREETT (Agricultural Research Education, Extension and Technology Transfer) initiative is making significant investments in agricultural research, education, and Extension to work in key areas of agricultural production taking advantage of the technological changes that are transforming agriculture and complementing the University's MnDRIVE (MN Driven Innovation Economy) initiative investments.

The Department of Bioproducts and Biosystems Engineering, College of Food, Agricultural and Natural Resource Sciences (CFANS) at the University of Minnesota seeks candidates for a 9-month tenure-track assistant professor position in the broader area of measurement science and agro-bioinformatics with research and teaching (50%/50%) responsibilities.

The goal of the measurement science and agro-bioinformatics position is to improve efficiency in agricultural systems by developing new ways to collect, interpret, and analyze agricultural data at various scales, and help create management solutions to improve decision making. Areas of research may include quantifying the interactions between agricultural systems and the biotic, abiotic and/or physical factors affecting agricultural efficiency. The faculty member will be expected to advance the design and implementation of highly efficient agricultural systems that have minimal adverse impacts on the environment. The scope may cover a broad spectrum of disciplines, from sensing networks and measurement technologies, to data collection, database development, data analysis, and data integration and dissemination technologies/platforms.

The University of Minnesota's robust research, teaching, and Extension programs have a long history of developing and delivering cutting edge research and education to farmers and other stakeholders. The person in this faculty position will address a critical need in the broad area of measurement science and agro-bioinformatics. Responsibilities include working with both the public and private sectors to develop new technologies and guidelines for improving efficiency while reducing negative environmental impacts. This faculty member will help Minnesota maintain its strong leadership position in sustainable agriculture.

The person in this position is expected to develop a nationally and internationally recognized research program, seek and secure extramural research funding from state and national competitive grant programs, and develop an independent research program of basic and applied research. The person is expected to build collaborations across disciplines, and closely interact with other departments within CFANS and across the University including the University of Minnesota Informatics Institute (UMII). The University of Minnesota offers opportunities to work with engineers, agricultural scientists, and other faculty on campus and a network of Research and Outreach Centers across the state.

Teaching responsibilities for this position are envisioned to include undergraduate and graduate level courses offered by the department and related to the successful candidate's discipline and background, which may

include advanced precision agriculture, big data analytics in agriculture, agro-bioinformatics, or sustainable systems. Other faculty responsibilities include advising graduate students and service commitments to the department, college, University, and the profession.

Qualifications

Required: PhD in biological systems engineering, bioinformatics, computer science, or a related agricultural, environmental, or computational field. Basic and applied research experience in biological/agricultural systems that are important in Minnesota. Demonstrated record of publication within discipline.

Preferred: Preference will be given to candidates with: a strong peer reviewed publication record and experience in measurement science and informatics applications; evidence of abilities to work collaboratively on multidisciplinary projects; evidence of potential to develop and manage interdisciplinary research programs at the forefront of the discipline; evidence of effective teaching with diverse audiences and excellent written and oral communication skills; demonstrated experience in obtaining external funding; interest in, experience with, and commitment to diversity and inclusiveness.

Salary and Benefits Salary is competitive and commensurate with experience and qualifications. The University's outstanding fringe benefits package includes participation in the University's faculty retirement program; group life, medical, and dental insurance plans; and sabbatical, semester, and parental leave opportunities. Detailed benefits information is available at: http://humanresources.umn.edu/benefits

Application Instructions

Interested applicants should submit a cover letter referencing the Measurement Science and Agro-Bioinformatics faculty position; detailed curriculum vitae; statement of research (2 pages); statement of teaching (1 page); copies of official undergraduate and graduate transcripts; a brief statement describing interest in, experience with, and commitment to diversity and inclusiveness (1 page); and a list of three references including contact information to the online application system described below. Letters from three references should be sent to bbe1390@umn.edu. To guarantee full consideration, all application materials, including reference letters, must be received by March 20, 2017. Review of applications will begin March 20, 2017 and continue until the position is filled. The position will be available in Fall 2017.

Please apply online via the University of Minnesota Employment System: https://humanresources.umn.edu/jobs. Enter Job ID 315687.

Please visit the following links to learn more about the Department of Bioproducts and Biosystems Engineering, www.bbe.umn.edu; the College of Food, Agricultural and Natural Resource Sciences, www.cfans.umn.edu; the AGREETT program; www.cfans.umn.edu/agreett; University of Minnesota Informatics Institute (UMII) http://www.research.umn.edu/umii/; and University of Minnesota Extension, www.extension.umn.edu.

Any offer of employment is contingent upon the successful completion of a background check.

The University of Minnesota provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. As an institution committed to demonstrating excellence through diversity, the College of Food, Agricultural and Natural Resource Sciences and the University are committed to hiring a diverse faculty and staff, and strongly encourage candidates from historically underrepresented groups to apply. We welcome you to visit our college's Diversity and Inclusion web page at: http://www.cfans.umn.edu/diversity/