Faculty Cluster Hire in Integrative Precision Agriculture (Open Rank)

POSITION TITLE AND DESCRIPTION: The University of Georgia invites applications for multiple positions in Integrative Precision Agriculture at the Assistant, Associate or Full Professor rank with academic-year appointments. This is year 2 of a university-wide search; home department appointments will be made based on area of expertise in consultation with the appropriate department head and dean.

MAJOR RESPONSIBILITIES: Building on one of its key research strengths, the University of Georgia is conducting a cluster hire to fill nine tenure-track or tenured faculty positions in the area of Integrative Precision Agriculture, of which at least four are being recruited for a target start date of August 2022. This is part of a major hiring initiative that will bring over 50 new faculty members in the broader area of Data Science and AI to the university. Outstanding candidates who can contribute significantly to the application of digital agriculture technologies, data analytics, or models to sustainable intensification of cropping or plantation forestry systems relevant to the southeastern U.S. are especially encouraged to apply. Illustrative examples of the type of expertise sought include, but are not limited to:

- **Sensor Development and Distributed Sensing** – e.g., novel soil- or plant-embedded sensors and biodegradable sensor networks for distributed in-situ measurements of agricultural and environmental variables.
- **Systems Modeling** – e.g., predicting root and shoot growth, nutrient and water uptake, host-microbiome interactions, and pest/pathogen spread at field and landscape scales to fine-tune site-specific crop management, optimize yield potential, and minimize environmental impacts.
- **AI-Enabled Decision Analysis and Data Analytics** – e.g., leveraging data from high-resolution images and sensor networks to improve soil, crop, and plant health management decisions at field and landscape scales; applying machine learning and data mining methods to crop and agricultural datasets for yield prediction and sustainability.
- **Automation and Actuation** – e.g., robotics and imaging technologies for phenomics and precision crop management; smart machinery for belowground seed placement and precision pest management; and accurate detection of biotic and abiotic plant stressors.
- One of the positions to be recruited will focus specifically on **Co-Robotics and Human-Robotic Interactions in agricultural systems**. Research may include human-in-the-loop systems and the safe co-existence of workers and robots in close proximity while leveraging the relative strengths of robots and humans in planning and performance of agricultural tasks. This position will be recruited into the School of Electrical & Computer Engineering.

The new faculty members are expected to develop a vigorous, high-impact, externally funded research program; work closely with other members of the cluster hire and existing faculty specializing in precision agriculture; effectively mentor graduate students and postdoctoral scientists; effectively support our teaching mission at the undergraduate and graduate levels; and contribute to a diverse and inclusive environment within the university. Specific teaching assignments will be negotiated with the hiring department, but are expected to be commensurate with a 25% instructional appointment.

REQUIRED QUALIFICATIONS: All candidates must have a Ph.D. in an agricultural science, engineering, computer science or related discipline. Candidates must also have a documented research background appropriate for the appointment rank, as evidenced by peer-reviewed publications, in the application of technologies, data analytics, or models to problems in agriculture or biology. For

information about the requirements for each faculty rank, please see the [UGA Guidelines for Appointment, Promotion and Tenure](#).

To be considered at the rank of Associate Professor, candidates must have at least 5 full years in rank at the Assistant Professor level. To be considered at the rank of Professor, candidates must have at least 5 full years in rank at the Associate Professor level.

To be eligible for tenure upon appointment, candidates must be appointed as an associate or full professor, have been tenured at a prior institution, and bring a demonstrably national reputation to the institution. Candidates must be approved for tenure upon appointment before hire.

Specific criteria for Associate Professor and Professor level in potential home departments are summarized at https://provost.uga.edu/policies/appointment-promotion-and-tenure/promotion-tenure-criteria/

PREFERRED QUALIFICATIONS: Two years of postdoctoral experience preferred.

POSITIONS AVAILABLE: 1 August 2022. Review of applications will begin on 4 January 2022; however, applications will be accepted until the positions are filled.

APPLICATION PROCEDURE: Inquiries about the positions should be directed to the co-chairs of the search committee, Dr. Jaime Andres Camelio (jcamelio@uga.edu) in the College of Engineering or Dr. Harald Scherm (scherm@uga.edu) in the College of Agricultural & Environmental Sciences. All application materials must be submitted via the university's job portal at https://www.ugajobsearch.com/postings/227850 Materials to be uploaded include i) cover letter addressing the candidate's experience relative to the responsibilities of the position; ii) curriculum vitae; iii) graduate-level academic transcripts; iv) statement of research interests, including a discussion of how the candidate's research would complement existing precision agriculture efforts at UGA; v) description of teaching experience and interests; vi) diversity statement describing the candidate's commitment to working toward achieving equity and enhancing diversity, and vii) names and contact information of four professional references. Selected applicants will be required to submit a background investigation demonstrating eligibility for employment with the University of Georgia.

ABOUT THE UNIVERSITY OF GEORGIA: The [University of Georgia](#) (UGA), a land-grant and sea-grant university with statewide commitments and responsibilities is the state's oldest, most comprehensive, and most diversified institution of higher education. UGA is currently ranked among the top 16 public universities in U.S. News & World Report. The University's main campus is located in Athens, approximately 65 miles northeast of Atlanta, with extended campuses in Atlanta, Griffin, Gwinnett, and Tifton. UGA was founded in 1785 by the Georgia General Assembly as the first state-chartered University in the country. UGA employs approximately 1,800 full-time instructional faculty and more than 7,700 full-time staff. The University's enrollment exceeds 40,000 students including over 30,000 undergraduates and over 9,900 graduate and professional students. Academic programs reside in 18 schools and colleges, as well as a medical partnership with Augusta University housed on the UGA Health Sciences Campus in Athens.

The incumbents are expected to work collaboratively with each other and with existing precision agriculture faculty at the University of Georgia, including faculty in cross-cutting units such as the [Phenomics and Plant Robotics Center](#), the [Precision Agriculture team](#), and the [Institute for Artificial Intelligence](#), among others. Plans are underway for a new Institute of Integrative Precision Agriculture and a facility to support industry-academic partnerships in the university's Innovation District.

The University of Georgia is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, ethnicity, age, genetic information, disability, gender identity, sexual orientation or protected veteran status. Persons needing accommodations or assistance with the accessibility of materials related to this search are encouraged to contact Central HR (hrweb@uga.edu).