

## Ph.D. Assistantship in the Department of Soil, Water and Ecosystem Sciences at the University of Florida, Gainesville

The Environmental Soil Physics and Hydrology Laboratory in the Institute of Food and Agricultural Sciences (IFAS) Department of Soil, Water and Ecosystem Sciences (SWES), at the University of Florida, Gainesville accepts applications for a Ph.D. Assistantship starting in *Spring semester 2023*. The assistantship covers an annual stipend of \$30,000; tuition waiver and health insurance. [See here for full details.](#)

We are looking for a highly motivated Ph.D. student to work on an interdisciplinary project aimed at improving water and nutrient use efficiency of Florida's irrigated agriculture in view of a changing global climate. The Ph.D. research will be centered around the application of remote sensing and machine learning for the development of novel physical models for real-time estimation of root zone water and nutrient dynamics to provide decision support for farm-level precision water and nutrient management. The successful applicant is expected to contribute to laboratory and field experiments, the collection and analysis of spatiotemporal data for hydraulic and physicochemical soil property estimation, as well as to the development of physical models for root zone water and nutrient dynamics estimation, and to the dissemination of research findings via journal publications and presentations to agricultural and environmental stakeholders and at scientific meetings.

### Required Qualifications

- Master's degree in Soil Science, Environmental Science, Agricultural Engineering, Vadose Zone Hydrology, or closely related fields.
- Strong previous academic performance.
- Excellent oral and written communication skills (non-native English speakers please see [here](#) for TOEFL/IELTS requirements).

### Preferred Qualifications

- Excellent background in soil physics and vadose zone hydrology.
- Excellent programming (e.g., Python, Matlab, R, etc.) and computational skills.
- Prior experience in remote sensing, geospatial analysis, and machine learning.

### Application Process

Applicants are required to submit a formal application to the Department of Soil, Water and Ecosystem Sciences (SWES) graduate program prior to *October 1<sup>st</sup>, 2022*. [See here for details.](#) Applicants are strongly encouraged to contact [Dr. Ebrahim Babaeian](#) at [ebabaeian@ufl.edu](mailto:ebabaeian@ufl.edu) prior to the formal application to the SWES graduate program, and provide their detailed CV, a statement of research experiences and interests, unofficial transcripts, and the contact information for three references (no letters are required). The review of applications starts immediately and will continue until the Ph.D. Assistantship position is filled. Shortlisted candidates will be contacted and interviewed virtually. Individuals from underrepresented backgrounds are strongly encouraged to apply.

For facts about the University of Florida and its core values please see [here](#).