

Graduate Research Assistantship (MS Level) - University of Florida, Gainesville

The Department of Soil, Water, and Ecosystem Sciences (SWESD), the Institute of Food and Agricultural Sciences (IFAS) at the University of Florida, Gainesville accepts applications for an MS Assistantship starting in **Fall semester 2023**. The project is a cooperative effort between the UF and the USDA-NRCS scientists. The assistantship will cover stipend, tuition, and health insurance for two years.

We are seeking a highly motivated candidate to work on an interdisciplinary project aims to develop novel models that integrate multiscale satellite remote sensing observations (optical, thermal and microwave), soil physical information, climate variables, and machine/deep learning techniques to model and map real-time soil moisture dynamics with high spatiotemporal resolution in the U.S. The output of the project can be used for a wide range of application such as agricultural water management, weather and climate modeling, mitigation of natural disasters, ecosystem response to climate. The successful candidate is expected to contribute to the collection and analysis of large datasets (in-situ and satellite), development of machine/deep learning models for real-time soil moisture mapping, and to the dissemination of research findings through peer-reviewed journal articles and presentations at scientific meetings/conferences. change.

Required Qualifications

- Bachelor's degrees in Soil and water sciences, Civil engineering (Water Resources), Earth/Atmospheric Science, Agricultural and Biological Engineering, Remote Sensing, or closely related fields.
- Strong previous academic performance.
- Programming and computational skills (Python, MATLAB, or R).
- Excellent oral and written communication skills (non-native English speakers please see here for TOEFL/IELTS requirements).

Preferred Qualifications

• Prior experience in hydrological modeling, remote sensing, geospatial analysis, and machine learning.

Application Process

Applicants are required to contact <u>Dr. Ebrahim Babaeian</u> at <u>ebabaeian@ufl.edu</u> or <u>Dr. Sabine Grunwald at sabgru@ufl.edu</u> and provide their detailed CV, a statement of research experiences and interests, unofficial transcripts, and the contact information for three references (with the email title "*Inquiry about MS Position*"). The review of applications starts immediately and will continue until the position is filled. The selected candidate(s) will submit a formal application to the Department of Soil, Water, and Ecosystem Sciences (SWESD) graduate program (<u>See here for details</u>). Individuals from underrepresented backgrounds are strongly encouraged to apply.

For facts about the University of Florida and its core values please see here.