

## Fully-supported PhD student(s) at UIUC in <u>Hydrological and</u> Biogeochemistry Modeling and Hyperspectral Remote Sensing

We have two openings for full-funded PhD students at the University of Illinois at Urbana-Champaign. Funding up to five years is guaranteed for well-qualified candidates through competitive fellowship, research-assistant, and/or teaching-assistant. We accept students at any time of a year, not confined to only fall semester.

Information about the Dr. Guan's lab can be found at: http://faculty.nres.illinois.edu/~kaiyuguan/. Dr. Guan is a Blue Waters Professor in ecohydrology and remote sensing in the Department of Natural Resources and Environmental Sciences and National Center for Supercomputing Applications (NCSA). Guan's lab uses computational models, remote sensing data, field work, machine learning, and supercomputing (Blue Waters) to address how climate and human practices affect food security, water resource availability, and ecosystem functioning.

This recruitment targets at the following specific directions:

- (1) Modeling hydrological and biogeochemical cycles in advanced earth system models;
- (2) Data assimilation of satellite data into earth system models;
- (3) Hyperspectral remote sensing (algorithm development based on radiation transfer and machine learning) and its applications;
- (4) Advanced algorithm development using Artificial Intelligence for satellite applications.

The admitted students should have flexibility to work on the above topics upon the guidance and supervision of Dr. Guan. Strong quantitative and programing skills are required for successful candidates. The project will involve intense data processing/analysis, large-scale model simulation, and possibly field work. Proficiency in spoken/written English is mandatory.

All applicants should meet the minimum requirements of GPA and GRE by the graduate admission (http://www.grad.illinois.edu/admissions/apply/requirements). Information for applying to NRES can be found here: https://nres.illinois.edu/graduate/apply. International students should also meet the minimum requirements of TOEFL (the same link above). The enrollment time is **flexible** 

Prospective graduate students are encouraged to contact Dr. Guan (kaiyug@illinois.edu) first to discuss potential research projects and opportunity before applying. When contacting by email, please include the following items: unofficial transcripts, curriculum vitae, GRE score, names and contact information of three references, and a brief personal statement that highlights skills relevant to the above directions. We greatly appreciate all the interested applications, but advise that only candidates shortlisted for interview will be notified of the application results.

The University of Illinois at Urbana-Champaign is a world leader in research, teaching and public engagement, distinguished by the breadth of its programs, broad academic excellence, and internationally renowned faculty and alumni. Illinois serves the world by creating knowledge, preparing students for lives of impact, and finding solutions to critical societal needs. The University of Illinois is an Affirmative Action/Equal Opportunity Employer. The administration, faculty, and staff embrace diversity and are committed to attracting qualified candidates who also embrace and value diversity and inclusivity. Visit www.inclusiveillinois.illinois.edu.