



Call for Applications: Ph.D. and Master Positions in Agroecosystem Sensing and Modeling at LSU and LSU AgCenter

Dr. Peng Fu, Assistant Professor, at **School of Plant, Environmental and Soil Sciences, Louisiana State University (LSU)** and **Louisiana State University AgCenter (LSU AgCenter)**, is seeking a highly motivated Ph.D. student to join the **agroecosystem sensing and modeling lab** (ASML) starting in **Summer** or **Fall 2025**. The ASML specializes in remote sensing, artificial intelligence, computational/process-based modeling, and statistical analysis to address critical issues in **food/energy security, sustainable agriculture, climate change**, and beyond.

Research Opportunities

Successful candidates will contribute to advanced monitoring capabilities to track agroecosystem changes and improved understanding of ecosystem dynamics. Potential research areas include:

(1) **advancing ecosystem sensing:** developing new datasets and/or algorithms relevant to agroecosystems (e.g., plants, soil, and water).

(2) **process-based modeling:** Quantifying and predicting agroecosystem services and dynamics (e.g., crop yield, water cycles, soil organic carbon).

(3) **AI, computational modeling, and statistical analysis:** Enhancing understanding of climate impacts on agriculture for sustainable agricultural practices.

Candidates will have the opportunity to collaborate with leading scientists in diverse fields such as **agronomy, genomics, hydrology, plant physiology, remote sensing, micrometeorology, soil science, ecology, geography, and environmental science** from **LSU, USDA, United Nations Food and Agriculture Organization (FAO)**, and other prestigious institutions. Graduate students in the ASML are expected to contribute to **the development of innovative research projects and proposals.**

Benefits

- **Stipend:** >\$30,000/year (Doctoral students) or > \$22,000/year (Master students)
- **Tuition Waiver:** Approximately \$12,000/year for domestic students and ~\$30,000/year for out-of-state and international students.

Qualifications

- A bachelor's or master's degree in relevant disciplines (remote sensing, soil science, plant physiology, ecology, geography, biogeochemistry, hydrology, earth system science, etc).
- Strong programming and quantitative skills (e.g., python, R, machine learning).
- Proficiency in English, both spoken and written.
- Applicants should meet the minimum requirements of LSU graduate admissions. Information on minimum requirements of LSU graduate admissions and application process/deadline can be found at <https://www.lsu.edu/graduateschool/admissions/requirements-deadlines.php>.

Prospective students are highly encouraged to contact **Prof. Peng Fu** (pfu@agcenter.lsu.edu; pfu@lsu.edu) first with the subject “**prospective Ph.D. student**”. Please include in the email:

- Unofficial transcripts,
- Test scores (e.g., GRE and TOEFL),
- A brief personal statement,
- Research publications (if any).