The Department of Forestry in the College of Forest Resources at Mississippi State University is seeking applicants for a funded Ph.D. research assistantship. The successful candidate will be advised by Dr. Austin Himes and work closely with many other faculty members in the Department of Forestry to assess the climate change mitigation potential of afforestation practices under the USDA Conservation Reserve Program (CRP).

The student will be working on a multi-disciplinary research project monitoring and collecting samples from CRP forest sites across the southeastern U.S. Forest inventory measurements and destructive biomass sampling will be combined with terrestrial LiDAR scans, high-resolution point dendrometers recording tree diameter growth and allometric models to improve estimates of carbon sequestration and storage by trees in these systems. Additionally, soil samples and greenhouse gas measurements will be taken at each site to account for other major carbon pools and fluxes. All field data will be used to calibrate key parameters of the DayCent model and estimate the climate change mitigation potential of the CRP tree plantings within the study region.

The successful candidate will be expected to lead a team of field technicians in data and sample collection, process soil and gas samples in the laboratory, analyze data and communicate results through multiple peer-reviewed journal articles, presentations at national and international scientific conferences and reports to project partners. The position starts January 1st, 2022. This is a 4-year position that includes an annual stipend of $20,000, tuition waiver and insurance.

Required qualifications:
- Ability to meet all admission requirements of the Department of Forestry Graduate Program
- Valid driver’s license or ability to get one
- Master’s degree in forestry, natural resources, environmental science or related field (exceptional students with B.S. may be considered)
- Demonstrated excellence in English (written and oral) communication
- Willingness to drive long distances for field work with multiple consecutive overnight stays
- Ability to walk long distances encumbered with 30+ pounds of gear and conduct field research in challenging conditions

Preferred qualifications:
- Experience and/or strong interest in quantification and modeling of carbon stocks and fluxes
- Experience or willingness to learn R-statistical software, python or other coding languages
- Familiarity or interest in learning USDA NRCS sampling protocol and FIA protocol
- Experience writing peer-reviewed journal publications

Information about the Department of Forestry at Mississippi State University as well as admissions criteria can be found at https://www.cfr.msstate.edu/forestry/index.asp and https://www.grad.msstate.edu/. Interested candidates should contact Dr. Austin Himes by emailing a cover letter explaining your interest and qualifications for the position, a resume/CV, unofficial transcripts and contact information for 3 references. If you have taken the GRE general test, please provide your unofficial results with your resume/CV.
Successful applicants will be required to apply to the Graduate School at Mississippi State University. Review of applications will begin immediately and continue until the position is filled. The application deadline for 2022 spring enrollment is December 1 (domestic) and October 1 (international).

MSU is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, ethnicity, sex (including pregnancy and gender identity), national origin, disability status, age, sexual orientation, genetic information, protected veteran status, or any other characteristic protected by law. We always welcome nominations and applications from women, members of any minority group, and others who share our passion for building a diverse community that reflects the diversity in our student population.

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