

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR OF DIGITAL FORESTRY - NON-TENURE TRACK

Novel and emerging technologies and new data science approaches are converging to yield exciting capabilities to measure, monitor, and manage forests. The promise and potential of these new methods requires broadly transdisciplinary research and education to advance the understanding and management of forest systems. The Integrated Digital Forestry Initiative (iDiF; <https://ag.purdue.edu/digital-forestry/>) is building on Purdue University's strengths in forestry, engineering, computer science, aviation technology, and other disciplines to realize the potential of recent advances in remote sensing, big data, and artificial intelligence to ensure the productivity and sustainability of our global forests in the 21st century and beyond. The research assistant/associate professors in this cluster hire will complement and extend the research capabilities of iDiF with skills from a broad range of backgrounds.

POSITION

Research Assistant/Associate Professor of Digital Forestry, 12-months non-tenure track

RESPONSIBILITIES

The Integrated Digital Forestry Initiative at Purdue University will hire up to four non-tenure track Research Assistant/Associate Professors to conduct high-impact, mission-oriented research in an array of areas including but not limited to next-generation remote sensing with a wide range of sensors (e.g. RGB, LiDAR, multi/hyperspectral, synthetic aperture radar, etc.) and platforms (e.g. proximal, UAVs, manned aircraft, autonomous vehicles, and satellites) and cutting-edge analytical methods to advance the science and practice of forestry. Emphasis is on developing and applying new approaches for forest inventory, forest health monitoring, carbon accounting, detection/monitoring of fire and other disturbances, etc. Successful candidates will be expected to collaborate widely within iDiF to develop and lead well-funded, productive research programs that advance the development and application of novel and emerging technologies to measure, monitor, and manage forests. Joint appointment in other departments within and outside the College of Agriculture is possible. Successful candidates will be encouraged to contribute to Purdue's teaching and engagement mission areas as relevant opportunities arise and may have opportunities to mentor students.

QUALIFICATIONS

Qualified candidates must have a Ph.D. in forestry, ecology, remote sensing science and technology, computer science, engineering, or a related field by the preferred start date of August 2023. A record of scholarly publications, strong communication skills, and a history of collaborating across academic disciplines is essential. Successful candidates will have a track record of applying these skills to develop and demonstrate novel applications of emerging technology to understand and manage forests.

THE INTEGRATED DIGITAL FORESTRY INITIATIVE is part of Purdue's Next Moves: Plant Sciences 2.0 which includes investments in digital forestry to catalyze the transition of forestry into the digital age. iDiF seeks to develop new methods and strategies to manage our forests more



productively and sustainably. iDiF combines new and emerging technologies with transdisciplinary expertise to measure, monitor, and manage urban and rural forests to maximize social, economic, and ecological benefits. The iDiF research team includes expertise spanning the fields of forestry, engineering, computer science, aviation technology, information science and other disciplines to explore remote sensing, big data and artificial intelligence, and methods for applying them in forestry. The team is supported by Purdue Research Computing offering world-class cloud computing and a network of supercomputers.

THE COLLEGE

The Department is an integral part of the College of Agriculture, one of the world's leading colleges of agricultural, food, life, and natural resource sciences and ranked eighth in the world in the 2022 QS World University Rankings. The College is deeply committed to the three land-grant missions (teaching, research, and extension), to international activities and perspectives that span all missions, and to excellence in all we do. The College has 11 academic departments and includes 302 faculty, 2,823 undergraduate students, and 689 graduate students. The College's current strategic plan can be accessed at [Strategic Plan \(purdue.edu\)](#).

APPLICATION INSTRUCTIONS

Applications must include a cover letter, a current curriculum vitae, official academic transcripts, statement of research interests, and contact information for three references. Applications should be assembled into a single PDF and submitted electronically to <https://performancemanager8.successfactors.com/sf/jobreq?jobId=23832&company=purdueuniv> for internal candidates or <https://careers.purdue.edu/job-invite/23832/> for external candidates. A background check is required for employment in this position. Review of applications will begin Feb. 15, 2023, and will continue until the positions are filled. Address all inquiries to chair of the search committee, Dr. Brady Hardiman (bhardima@purdue.edu), Department of Forestry and Natural Resources, Purdue University. Please include "Digital Forestry Search" in the subject line of all emails.

Purdue University, the College of Agriculture, and the Department of Forestry and Natural Resources are committed to free and open inquiry in all matters. Candidates are encouraged to address in their cover letter how they are prepared to contribute to a climate that values free inquiry and academic freedom

Purdue University is committed to advancing diversity in all areas, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in their cover letter, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity, equity, and inclusion. Purdue is an ADVANCE institution – <https://www.purdue.edu/advance-purdue/>.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.