

## Post-Doctoral Research Fellow

Forest Advanced Computing & Artificial Intelligence Laboratory (FACAI)  
Department of Forestry and Natural Resources (FNR), Purdue University

**Background: Forest Advanced Computing and Artificial Intelligence (FACAI) Laboratory-** As a **Global Forest Biodiversity Initiative (GFBI)** continental center of research, education, and public outreach for North America, FACAI Lab employs the paradigm of Artificial Intelligence (AI) encompassing different state-of-the-art machine learning and statistical methods to study global, regional, and local forest resource management and biodiversity conservation. FACAI has two parallel foci. The economic focus (FACAI-ECON) is supervised by **Prof. Mo Zhou**, and the ecological focus (FACAI-ECO) is supervised by **Prof. Jingjing Liang**. All the graduate students and post-doctoral fellows are affiliated with FACAI-ECON, FACAI-ECO, or both.

We are compiling the first global forest inventory database (GFBi) for worldwide economic and ecological research projects. We have 5Tb data storage and 1T-RAM nodes at the **Rosen Center for Advanced Computing**, the research computing arm of Information Technology at Purdue (ITaP), the University's central IT organization, and have access to 3-Tb storage space at Purdue Data Depot, a high-capacity, fast, reliable and secure data storage service designed, configured and operated for the needs of Purdue researchers in any field and shareable with both on-campus and off-campus collaborators.



Some of our featured publications:

-Steidinger, B. S., T. W. Crowther, J. Liang, M. E. Van Nuland, G. D. A. Werner, P. B. Reich, G. Nabuurs, S. de-Miguel, M. Zhou, N. Picard, B. Herault, X. Zhao, C. Zhang, D. Routh, and GFBI consortium. 2019. Climatic controls of decomposition drive the global biogeography of forest-tree symbioses. *Nature* **569**:404-408.

-Liang, J., T. W. Crowther, N. Picard, S. Wiser, M. Zhou, and GFBI Consortium. 2016. Positive biodiversity-productivity relationship predominant in global forests. *Science* **354**.

- Liang, J., M. Zhou, P. C. Tobin, A. D. McGuire, and P. B. Reich. 2015. Biodiversity influences plant productivity through niche–efficiency. *Proceedings of the National Academy of Sciences*:201409853.

### Current Openings:

- Post-Doctoral Research Fellow in big-data ecology.

**Qualifications:** Passion for path-making research is a must. Strong quantitative skills and oral and writing proficiency are highly desired. We welcome applicants from various disciplines. Preferences will be given to those who have experience and passion in large-scale forest ecology studies and big data analyses.

**Salary and Benefits:**

The successful candidate will receive an annual compensation of ca. US\$47,500 with benefits. Additional support may be available pending satisfactory performance. The successful candidate will have opportunities to work with GFBI data and resources on high-impact publications.

**Application:** Applications are now accepted with flexible entry dates.

For Post-doc position, a single pdf file containing a) the applicant's CV, b) a Vision Statement outlining the candidate's research interests, career goals, and qualifications, especially with regard to the foregoing criteria, c) two (2) representative publications/ job market paper/working papers, and d) contact information of three (3) references, should be sent to the email address listed below.

Finalists for these positions may be invited to visit FACAI at Purdue University for an on-campus interview.

**Contact:**

Dr. Jingjing Liang <[jjliang at purdue.edu](mailto:jjliang@purdue.edu)>

Visit us at Forest Advanced Computing & Artificial Intelligence Laboratory (FACAI)

<https://ag.purdue.edu/facai/>

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