# Cluster Hiring for Multiple Graduate Research Assistantships (Ph.D. and/or MSc level)
## Forest Advanced Computing & Artificial Intelligence Laboratory (FACAI)
## Department of Forestry and Natural Resources, 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 ground-sourced forest inventory database (GFBi) for worldwide economic and ecological research projects. We have 256G-RAM nodes at the Rosen Center for Advanced Computing, the re-search 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:

- Graduate Research Assistantship (GRA) in economics, operations research and/or social sciences;

- Graduate Research Assistantship (GRA) in ecology, data science, and/or machine learning;

**Qualifications**:  Passion for path-making research is a must. Strong quantitative skills and oral and writing proficiency are highly desired. Application deadline is on a rolling basis.

**Salary and Benefits**:

For GRA positions, the incumbents' initial academic-year ("AY") salary will be $19,915 (MSc) or $22,850 (PhD). Ph.D. assistantships with tuition waiver are funded up to three years, contingent upon satisfactory annual performance and availability of funding. A fourth year of support also may be possible. M.S. assistantships with tuition waiver are funded up to two years, contingent upon satisfactory annual performance and availability of funding. In addition, Purdue University provides a generous fringe benefit package.

**Application**: Applications are now accepted for the entry terms of spring or fall 2020.

A pdf file containing the applicant's CV, transcripts, GRE score, contact information of three references, and personal statement/plan of study should be sent to the email address listed below. Requirements for admission to the Graduate Program of the Department of Forestry and Natural Resources can be found at the following link: https://www.purdue.edu/gradschool/prospective/gradrequirements/westlafayette/fnr.html.

For more information, visit: https://ag.purdue.edu/fnr/Pages/GraduateStudiesFNR.aspx

**Contact:**
Economics focus: Dr. Mo Zhou, mozhou@purdue.edu
http://www.gfbinitiative.org/zhou

Ecology focus: Dr. Jingjing Liang   jjliang@purdue.edu
http://www.gfbinitiative.org/liang

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.*