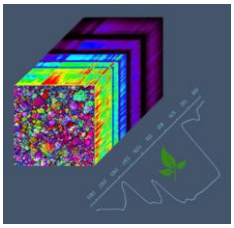
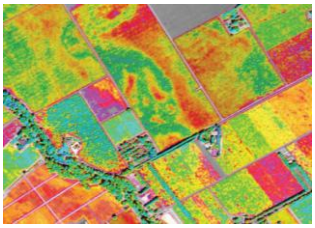
The University of Texas at Austin
Department of Integrative Biology

Department of Integrative Biology
Patterson Labs, 2415 Speedway, Texas 78712

PhD Position in Biologically-Grounded AI, Remote Sensing, & Environmental Intelligence





Position description: The Dao ReSEIL Lab in the Department of Integrative Biology at the University of Texas at Austin invites applications for a PhD position to begin in the Fall 2027. The position will focus on developing and applying advanced AI approaches to analyze big multi-source remote sensing (hyperspectral, multispectral, thermal, LiDAR from ground robots, drones and satellites) and geospatial data to address pressing ecological, agricultural, and environmental challenges. The central objective is to **develop biologically-grounded AI and foundation models that integrate multimodal spectral data with biological, environmental, and textual information to reveal the biological and ecological processes underlying plant responses to environmental stresses across scales**. The student will work under Dr. Phuong Dao and collaborate with researcher in the UT Department of Computer Science and Jackson School of Geosciences.

Qualifications: The candidate should have a BSc in the field of computer science, data science, remote sensing, geospatial science, biological science, environmental science, or related disciplines. Having an MSc degree (for PhD position) is asset but not required. We are particularly seeking candidates with experience in collecting and analyzing remote sensing and geospatial data together with biological and field measurements, and developing computational and machine learning methods for image and textual data analysis. Candidates should have strong programming skills in R, Python, MATLAB, or other languages. Also, experience or knowledge in plant biology, plant ecology, agriculture, or environmental science is an asset but not required.

How to apply: Please email your cover letter, CV, transcripts, one representative publication in ONE PDF file named *YourSurname_Grad_Application.pdf* to Dr. Phuong Dao at phuong.dao@austin.utexas.edu, with the subject *YourSurname_Grad_Application*. **Applications deadline is November 20**. Selected candidates will be invited to submit an official application to UT application portal.

About PI and group: Dr. Phuong Dao will join the University of Texas at Austin as an Assistant Professor in January 2026, after serving as an Assistant Professor at Colorado State University. He received his Ph.D. from the University of Toronto and completed postdoctoral training at the UW–Madison. The Dao Lab (daolab.weebly.com) studies plant and ecosystem responses to drought, pests, pathogens, and invasive species, integrating remote sensing, spatial science, machine learning, biochemical approaches, and biological modeling. The lab is equipped with several advanced drone systems including a high-end integrated full-range hyperspectral system (HySpex Mjolnir VS-620), an integrated multispectral & thermal system (Altum-PT), and a full-range field spectroradiometer (SVC HR-1024i). The student will have many opportunities to collaborate with researchers in the Integrative Biology and Computer Science departments, as well as partners at NASA, USDA, and institutions across the US, Canada, and Germany.

About the institution: UT Austin is a world-renowned research university, consistently ranked among the top institutions nationally and internationally, particularly in AI, data science, earth sciences, geospatial science, and ecology. The university hosts TACC, home to one of the most powerful academic supercomputers in the world. Located in the vibrant and fast-growing city of Austin—a major tech hub often called 'Silicon Hills'—UT offers exceptional opportunities for research, innovation, and collaboration with industry.