

Mia Mitchell

PhD Student, University of Washington | Seattle, WA

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EDUCATION

PhD student, Environmental and Forestry Sciences, University of Washington 2025 - Present
Research:

BSc, Environmental Science, Brown University 2019 - 2023
Honors thesis: Spatial Contagiousness of Tree Mortality across Barro Colorado Island

RESEARCH & PROFESSIONAL EXPERIENCE

Graduate Research Assistant, PhD 2025 - Present
School of Environmental and Forest Sciences, University of Washington, Seattle, WA

Postbaccalaureate Researcher 2024 - 2025
Earth and Environmental Sciences Division, Los Alamos National Laboratory, Los Alamos, NM
Quantified forest structure from remote sensing images using convolutional neural networks with Dr. Charles Abolt
Integrated vegetation demography models (ELM-FATES) into a disturbance response model with Dr. Adam Achley and Dr. Rod Linn

Research Intern 2022, 2023
Quantitative Forest Ecology Laboratory, Smithsonian Tropical Research Institute, Panama, Panama
Assisted Dr. Helene Muller-Landau and Dr. KC Cushman in quantifying landscape-level variation in forest structure and dynamics with mobile laser scanning and drone photogrammetry
Participated in fieldwork assessing tree mortality, canopy crowns, and wind dynamics on Barro Colorado Island with Pablo Ramos and Dr. Toby Jackson

Naturalist 2021
Center for Alaskan Coastal Studies, Homer, AK
Gave educational hikes discussing the history, ethnobotany, ecology, and geological processes of Kachemak Bay
Volunteered with the Boys and Girls Club of the Kenai Peninsula
Participated in fieldwork within the intertidal zone of Peterson Bay, Alaska, assessing Sea Star Wasting Syndrome

Geographic Information Systems Intern
Interior Alaska Land Trust, Fairbanks, AK [Remote] 2021
Made a conservation priority of historical aerial imagery maps using ArcGIS
Developed educational initiatives to raise awareness about land use change in Fairbanks

Wildlife Rehabilitation Intern 2017 - 2018
Chattahoochee Nature Center, Roswell, GA
Performed animal husbandry duties for raptors, beavers, turtles, and snakes
Educated the community about the health and ecosystem services of the Chattahoochee River Basin

TEACHING EXPERIENCE

Sheridan Center Seminar for Transformation Around Teaching (START) To redesign <i>Environmental Archaeology</i> (ARCH 1870) with D. Plekhov and Z. Dunseth	2022
Biology Department, Brown University Undergraduate Teaching Assistant - BIOL 0210, Diversity of Life	2021 - 2022

GRANTS, FELLOWSHIPS, & AWARDS

American Geophysical Union (AGU) Biogeosciences Travel Grant [\$1300]	2025
Graduate Student Excellence & Recruitment Award, University of Washington	2025
Achievement Rewards for College Scientists (ARCS) Fellowship [\$22500]	2025 - 2028
Summer Research Award, Institute at Brown for Environment and Society [\$4000]	2023
Data Science Fellowship, Data Science Institute, Brown University [\$1000]	2022
Smithsonian Internship Award, Maxell-Hanrahan Foundation [\$3750]	2022
SPRINT-LINK Award, Brown University [\$4000]	2021
Undergraduate Teaching and Research Award, Brown University [\$4000]	2020
Joukowsky Research Apprenticeship [\$500]	2019
The Gates Scholarship, The Bill and Melinda Gates Foundation	2019

SCIENCE COMMUNICATION

[Miami-Dade County: A Legacy of Environmental Neglect](#)

Brown University & University of Miami. ArcGIS StoryMap. 2020

[Story of Ecological Succession](#)

Kachemak Currents. KBBI Alaska Public Radio Segment AM 890. 2021.

[History of Development in Fairbanks](#)

Interior Alaska Land Trust. ArcGIS StoryMap. 2021

[Wildfires & Local Jurisdictions in the Upper Yukon Division](#)

Brown University. ArcGIS StoryMap. 2021

PUBLICATIONS & MANUSCRIPTS

Mitchell, M., Abolt, C., Crennen, Z., Marcato, A., Atchley, A. *CHMer (Canopy Height Model-er): Accessible Deep Learning for Sub-Meter Canopy Height Predictions*. In preparation. Journal of Open Source Software. Los Alamos National Laboratory.

Mitchell, M., Cushman, K.C., Muller-Landau, H., et al. *Spatial Contagiousness of Canopy Disturbances in Lowland Tropical Forest*. In preparation, Smithsonian Tropical Research Institute.

Collins, A.D., Dillard, S.L., **Mitchell, M.**, et al. *Lidar User Input and Processing Intercomparison*. In preparation, Los Alamos National Laboratory.

Mitchell, M., Muller-Landau, H. C., Vasquez, V., Cushman, K., Garcia, M., Ramos, P., & Villareal, P.

(2023). *Digital Surface Models, Barro Colorado, 2018-2023* [Dataset].

<https://doi.org/10.25573/data.24021381.v2>

PRESENTATIONS

“CHMer (Canopy Height Model-er): Accessible Deep Learning for Sub-Meter Canopy Height Predictions,” American Geophysical Union, *New Orleans, LA*, December 2025

“Spatial Contagiousness of Canopy Disturbances in Lowland Tropical Forest,” American Geophysical Union, *Washington, DC*, December 2024

“Spatial Contagiousness of Canopy Disturbances on Barro Colorado Island,” Smithsonian Tropical Research Institute Symposium, *Panama, Panama*, July 2023