Eli Arbogast

eliarbogast.com

EDUCATION

University of Vermont: PhD in Computer Science (current)

Carleton College: BA in Biology, 2018–2022

EXPERIENCE

Graduate Research Assistant
2026-present

MEClab, University of Vermont

> On the Xenobots project team, working on information-theoretic analysis and predictive modeling of xenobot behavior

Machine Learning Engineer
2023

US Positronix

> Led multi-agent path planning for real-time robot motion in dynamic warehouse settings
> Modeled and animated robot movement in Blender

Visiting Researcher
2022-2023

Ohio State University, Energy Sustainability Research Lab

> Estimated the potential for underground hydrogen storage in the US using MATLAB

Wallace-Carver Fellow
2021

U.S. Department of Agriculture

> Analyzed 100,000+ soil carbon measurements, comparing traditional and equivalent-soil-mass methods, and presented the results to USDA soil scientists

Research Assistant
2021

Carleton College, Class of '55 Research Assistantship

> Evolutionary computing research with Prof. Anya Vostinar: built evolution mechanics into Minecraft as an educational mod (Java), which became the basis for my senior CS research project

Research Extern
2019

Chicago Botanic Garden

> Built statistical models in R of recent changes in native pollinator populations for the long-term Echinacea Project

Borlaug-Ruan Intern
2018

World Food Prize

> Researched the environmental impacts of agriculture at EARTH University, Costa Rica; published and presented the paper at the World Food Prize conference

SKILLS

Technical: Python, R, MATLAB, Java, C++ · machine learning, evolutionary computation, data analysis and visualization, web development

Creative: Music production and mixing, video production · cello, piano, guitar, drums