



izguenther6@gmail.com ◆ Portfolio: <https://github.com/izguenther6> ◆ he/him

Cumulative 3+ years of field-focused environmental protection experience

Proficient in biological process modeling & data science (Python, R, MATLAB, COMSOL)

WORK EXPERIENCE

Part-time roles in Philadelphia, PA

Aug 2025 - Present

- Computer Science / STEM tutor (TechCORE2 & Philly Tutors)
- Market Associate & Temp Market Manager (Rittenhouse Farmers Market)

Soil & Water Lab – Cornell University

Oct 2022 - May 2025

Research Technician (part-time, seasonal)

Ithaca, NY-USA

- Monitored pesticide leaching with NYS Department of Environmental Conservation
 - Tested 50+ surface/groundwater sites for contamination from 80+ pesticides
 - Developed hydrogeological models to predict future leaching in Python
 - Co-authored annual reports, presentations, and journal publication (pending)
- Built lab website in WordPress

Costa Farms – Decorative Horticulture

June - Aug 2023

Grower Department Intern

Miami, FL-USA

- Investigated the efficacy of four controlled-release fertilizers in outdoor plants
 - Oversaw 450+ potted plant experiments – setup, monitoring, data collection
 - Found key statistical insights on fertilizer performance in R

Wastewater Treatment Plant – City of Hastings

June - Aug 2022

Wastewater Intern

Hastings, MI-USA

- Ran daily lab tests on influent/effluent water (CBOD, coliforms, T/VSS, etc)
- Assisted team with equipment management and on-call sewer maintenance

EDUCATION & CERTIFICATIONS

Cornell University

Class of 2024

Biological Engineering, B.Sc.

Ithaca, NY-USA

- Study abroad - Fall 2023, Universidad de Cantabria, Santander, Spain
- Extracurricular - Outing Club, Club Basketball Team

Freediving Instructors International

Obtained June 2023

Level 1 Freediver

Miami, FL-USA

- Recreational freediving in fresh- / marine waters, ~20 meter depth

PUBLICATIONS & REPORTS

Theoretically Informed Machine Learning Models for Predicting Pesticide Leaching in NY

Poster presented August 2025 at Northeast Agricultural & Biological Engineering Conference

- Lead author

Water Quality Monitoring for Pesticides in Upstate NY - 2023 Annual Report

Submitted October 2024 to NYS Department of Environmental Conservation

- Primary section author on machine learning use for pesticide leaching prediction