Isaiah Guenther – Biological Engineering, B.S.

izguenther6@gmail.com ◆ Michigan, USA ◆ More Info: https://github.com/izguenther6

- Bio-Engineering graduate from Cornell University in NY-USA capable of both hands-on work and software-driven tasks
- Diverse professional experiences in academic, corporate, and governmental settings related to agriculture and conservation
- Seeking internships or temporary employment in Singapore from November 19, 2024 through Mid-May 2025 (Working Holiday Pass) in ag-tech, blue-tech, food-tech, or environmental sectors

SKILLS & CERTIFICATIONS

- Hands-On: wet lab, water sampling/testing, handling hazardous materials, working with animals, bioinstrumentation
- Software: biological modeling, statistics, machine learning Python, R, MATLAB, Java, COMSOL, Excel
- Languages: English (native), Spanish (conversational)
- **Certifications:** FII Level 1 Freediver (June 2023)

WORK EXPERIENCE

Soil & Water Lab - Cornell University

Oct. 2022 – Present

Ithaca, NY-USA / Remote

- In progress: Monitoring aquifers with NYS Department of Environmental Conservation (DEC)
 - o Sampling groundwater across New York State to test for pesticide contamination
 - o Developing machine learning models in Python that predict leaching events
- Researched water infiltration in soil through lab experiments and MATLAB image analysis
- Built lab website in WordPress http://soilandwaterlab.cornell.edu/

PRO-DAIRY: Environmental Systems - Cornell University

Jan. 2024 - May 2024

Ithaca, NY-USA

Research Assistant

Research Assistant

- Contributed to the NYS Department of Ag. & Markets' database on dairy farm manure management
 - o Measured methane emissions and collected manure samples at various treatment stages
- Co-wrote case study report on anaerobic digester at 400-cow dairy farm
- Calculated economic savings from covered manure storages in Python

Costa Farms – Worldwide Supplier of House/Garden Plants

Summer 2023

Miami, FL-USA

- Grower Department Intern
 - Investigated the efficacy of four different controlled-release fertilizers in various outdoor plant species
 - Oversaw experimental operations setup, monitoring, data collection
 - $\circ \quad \text{Used R software to find key statistical insights from the fertilizer performance data} \\$
- Collaborated with intern team to cut costs of plant shipping by \$70,000 annually

Wastewater Treatment Plant – City of Hastings

Summer 2022

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

Cornell University Class of 2024

Biological Engineering, B.S – 3.30/4.0 GPA

Ithaca, NY-USA

- Study abroad Fall 2023, Universidad de Cantabria in Santander, Spain
- Extracurricular Club Basketball Team; Outing Club
- Notable courses Fluid Mechanics / Heat & Mass Transfer / Molecular Bio & Genetic Engineering of Plants / Fish Ecology / Sustainable Water System Design / Digital Food Engineering / Machine Learning with Big Data / Object-Oriented Programming