

EDUCATION

Cornell University, College of Agriculture and Life Sciences

August 2025-Present

- B.S. in Environmental Engineering; B.S. in Information Science

Stuyvesant High School (SAT: 1580, GPA: 4.0)

September 2021-June 2025

- Stuyvesant Diploma; Highest Honors in Environmental Science; Honors in Computer Science

EXPERIENCE

Climate Change Analyst, Eco Rising Solutions, NYC College of Technology

January 2025-Present

- Construct an AWS pipeline to train machine learning models to synthesize satellite land surface temperature information for any novel region on Earth, providing crucial high-frequency data.
- Develop machine learning models that can warn citizens of extreme heat two weeks in advance.
- Monitor temperature for over 400 NYC transportation infrastructure locations using advanced remote sensing, providing vital recommendations for capital projects dealing with urban heat.

Climate Change Researcher, NASA Goddard Institute For Space Studies

June 2024-Sep. 2025

- Developed a machine learning model to monitor, predict, and study changing lake quality and harmful algal blooms from space using satellite raster data and local land use features
- Analyzed and condense over 800,000 predicted points across over 4,000 New York State lakes and 20 years, with all results published on a high-throughput, scaleable, and interactive website.
- Wrote, submitted, and edited multiple published papers in various scientific journals; Lecture and present posters at NASA HQ, AGU, AMS, CUNY CREST, and Prototypes for Humanity.

Data Scientist Intern, Developer, Keeper.ai

July 2023-December 2023

- Invented new pairing algorithms based on user preferences and self-reported personalities.
- Optimized 20+ reusable UI components for thousands of users leading to a 35% success rate.

ACTIVITIES AND PROJECTS

Undergraduate Assistant, Gerson Watershed Biogeochemistry Lab

January 2026-Present

- Performed GIS analyses on mining ponds across watersheds and estimated geochemical fluxes.
- Conducted literature review on anthropogenic water bodies and their effects on nutrient cycling.
- Worked in wet laboratory to sterilize exhausted mercury samples for future use.

Water and Tech Subteams Member, Cornell GeoData Group

October 2025-Present

- Fabricate a buoy for collecting 10,000+ weather and water quality data within Cayuga Lake.
- Combine collected insitu data to finetune industry standard climate models for local watersheds and develop new water quality prediction models using machine learning techniques.

SKILLS

- Geospatial Modeling and Remote Sensing (GIS, Google Earth Engine, Sentinel, Landsat)
- Data Science and Machine Learning (Python, R, Scikit, Numpy, Pandas, Tensorflow, CUDA)
- Website Development and Databases (HTML/CSS, Javascript, SQL, Java, MongoDB, Git)

PUBLICATIONS

- Greene, J. A., **Metlitsky, L.**, Levine, A., Foley, E., Henry, M., Azarderakhsh, M., Blake, R. A., & Norouzi, H. (2025). A new perspective on estimating chlorophyll-a concentrations using machine learning and Remote Sensing: A case study of new york state lakes. *Ecological Indicators*, 180, 114316. <https://doi.org/10.1016/j.ecolind.2025.114316>