

# SAFFRON LIVACCARI

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## EDUCATION

**University of Pennsylvania** | Philadelphia, PA (exp) May 2022  
*Master of Environmental Studies*, Concentration in Resilience and Adaptation, GPA 4.0/4.0  
Relevant Courses: The Future of Water, Development of Sustainable Water Resources, Water Policy  
Risk Assessment, Topics in Ecological Design, Remote Sensing, ArcGIS  
Capstone Thesis: Designing green infrastructure in Manhattan on 34<sup>th</sup> and FDR Drive (funded by a grant)

**Stony Brook University** | Stony Brook, NY May 2018  
*BSc (Hons) Applied Mathematics and Statistics*  
Concentration in Operations Research, Minor in Music, GPA 3.7/4.0  
Magna Cum Laude, Women in Science and Engineering Honors Society

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## PROFESSIONAL EXPERIENCE

**Penn Sustainability** | Philadelphia, PA June 2021 – Present  
*Sustainability Internship*

- Supported goals for the Climate and Sustainability Action Plan 3.0 within the Sustainability Office
- Coordinated the outreach to Penn's waste and recycling facilities to identify how to reduce campus waste
- Quantified Scope 3 supply chain carbon emissions using LCA software
- Investigated and created a guide on sustainable procurement of furniture

**The Water Center at Penn** | Philadelphia, PA Oct. 2020 – Present  
*Water Resource Data Analyst*

- Analyzed 1,500 bacteria samples for the Schuylkill and Delaware River using Excel and Python
- Independently wrote Python code for various statistical tests including the Statistical Threshold Value, Geometric Mean, and Student's T-Test, and exported results to an easily digestible excel file using Pandas
- Produced over 50 graphs using matplotlib in Python to visualize the correlation of bacteria amounts with rainfall and location resulting in discovering the effects of CSO overflows
- Collected 10 water samples from the Delaware River focused on a rain event

**Invsto** | Lansdale, PA April 2020 – Aug. 2020  
*Python Programming Internship*

- Lead database programmer in a fully remote fintech trading startup with a 10-person international team
- Produced a database with over 5,000 records of stocks using MongoDB and Python
- Developed python code to read, upload, and check data in AWS Arctic

**First Derivatives** | New York City, NY June 2018 – Feb. 2020  
*Financial Engineer*

- Consultant for various clients focused on finance and compliance
- Supervised daily USD/CAD reconciliation for the Back-Office Project Delivery Team for Bank of Montreal
- Inspected a total of 21,000+ out of date client records by collecting reliable verification documentation to adhere to new standards of KYC/AML Protocol for Bank of New York Mellon
- Facilitated the Liquidity Stress Testing project for ScotiaBank as the lead UAT tester for BAU monthly code releases within Tableau

**Turkana Basin Institute** | Ileret, Kenya May 2017 – June 2017  
*Engineering Study Abroad Project*

- Relocated 50 elementary students from a collapsing school building to new classrooms built using an abandoned dormitory as a foundation
- Managed the relocation project from start to finish (idea, design, planning, gathering resources, and implementation), executed with the cooperation of 5 locals
- Inspired tribe members to create instruments out of unwanted items and initiated a music club at the school

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## EXTRACURRICULAR

**wH2O Journal** | University of Pennsylvania May 2021 – Present

- Peer reviewed journal articles for the Journal of Gender and Water

**Graduate Advisory Board** | University of Pennsylvania Sept. 2020 – Present

- Communication coordinator for events involving environmental master's students

**Mentor** | Stony Brook University Aug. 2017 – May 2018

- Supported incoming freshman in the School of Engineering and Applied Sciences to retain students in STEM

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## SKILLS & INTERESTS

- Python, Excel, ArcGIS
- Rock Climbing, Hiking, Classical Music, African Drumming