cma252@cornell.edu

310 Farm St #2e, Ithaca, NY 14850

EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Master of Engineering in Environmental & Water Resources Systems

Expected December 2018

cell: 419-450-9726

University of Puget Sound, Tacoma, WA

Bachelor of Arts in Philosophy, Minor in Environmental Policy

May 2013

Selected Coursework: Computer Science and Programming Using Python (MITX, SU'18) • Object-Oriented Programming and Data Structures (SU'18) • Computational Optimization (FA'18) • Decision Analysis (FA'18) • Machine Learning (FA'18)

SPECIALIZED SKILLS

Programming: Optimization, algorithms, data analysis, modeling. Proficient in Python, R, and Java.

Communication: Writing, public speaking, presentations. Languages: English, Spanish (fluent)

RELEVANT EXPERIENCE

Research Intern, Water Resources Institute, Ithaca, NY

Summer 2018

- Programmed algorithms to optimize models for a hydrology research project.
- Explored new methods for integrating Markov Chain Monte Carlo algorithms and other programming methods with water resources analysis.
- Collected and analyzed environmental data to inform models.
- Lead author on prospective journal article describing research findings.

CS 2110, Dept. of Computer Science, Cornell University

Summer 2018

- Wrote a series of non-trivial programs in an intermediate programming course.
- Coding assignments covered recursion on trees, linked list operations, heaps, and object-oriented programming.
- Other assignments involved analysis of algorithms, graphs, and data structures.

California Snowpack Modeling, Dept. of Biological and Environmental Engineering, Cornell University Spring 2018

- Programmed hydrologic models and model calibration algorithms in R to analyze climate projections.
- Evaluated prospective impacts of altered climate on California's water supply.

OTHER EXPERIENCE

Environmental Planning Intern, Philadelphia Water Department, Philadelphia, PA

Summer 2017

- Performed green stormwater infrastructure site planning using ArcGIS and Excel.
- Analyzed data for improving water system assessment.
- Wrote policy analysis for the Water Department's Strategic Plan.

Agricultural Extension Volunteer, U.S. Peace Corps, Paraguay

Fall 2013 to Winter 2015

- Organized community groups and education campaigns.
- Presented about agricultural and environmental issues.
- Built a school library and community garden.

LEADERSHIP EXPERIENCE

President, Peace Corps Library Committee, Paraguay

2015

Led national literacy and book distribution projects.

Project Manager, Peace Corps Partnership Grant, Paraguay

2015

Organized and managed an agricultural community development grant.

ACTIVITIES/INTERESTS

Writing; hiking; landscapes of the American West; rock climbing; travel.