
EDUCATION

Hamilton College

August 2018-May 2022

Bachelor of Arts; Major: Mathematics, Minor: Computer Science

- Computer Science GPA: 3.68 | Cumulative GPA: 3.56
- Relevant coursework: Artificial Intelligence, Computational Geometry, Principles of Programming Languages, Computer Organization, Data Structures, Applied Network Analysis, Linear Optimization
- Portfolio: [Eva Nolan - Portfolio](#)

SKILLS

Highly Proficient: Python, Ruby, X86 Assembly Language, R, LaTeX

Moderately Proficient: C++, Prolog, OCaml, Lisp/Scheme, Smalltalk, Excel

Light Familiarity: Stata, HTML, CSS

RESEARCH EXPERIENCE

Senior Seminar Research – Hamilton College Mathematics Department

August 2020-December 2020

- Conducted independent research analyzing online chess social network structure. Evaluated meaningfulness of online chess ranking. Compared network associativity with in-person chess to confirm efficacy of ranking system.
- Taught myself relevant network analysis tools including networkX python package and Cytoscape program.
- Submitted research paper to lichess.org, including proposing new network-diameter based method to identify cheating.

Mathematics Researcher – Elon University and NCA&T Joint REU in Mathematical Biology

May 2021-August 2021

- Collaborated to develop two computationally efficient, meaningful, and easy-to-use spline fitting methods to replace the Cook & Peters method (1981) traditionally used to reconstruct past climates using tree-ring data.
- Collaborated with small team to develop two computationally efficient, meaningful, and easy-to-use spline fitting methods used to reconstruct past climates from tree-ring data. These methods replace Cook & Peters 1981 approach.
- Analyzed tree-ring data from over 2,000 geographically diverse trees to develop and test accuracy of our methods.
- Adapted modern math techniques to accommodate niche biological research applications, wrote code to implement method in R with transparent methodology. Wrote a peer-reviewed paper synthesizing research outcomes and detailing method implementation.

RELEVANT WORK

Computer Science Teaching Assistant – Hamilton College Computer Science Department

August 2020-Present

- Observe and assist students during their Computer Science lab session. Develop thoughtful questions and hints to guide students towards correct code while furthering their understanding of the requisite skills and approaches.
- Grade coding projects and exams for 130+ students. Read code, locating errors and inefficiencies while providing meaningful feedback.
- Provide feedback to professors, identifying trends in the classes' strengths and shortcomings.

Mathematics Grading Assistant – Hamilton College Mathematics Department

August 2020-Present

- Evaluate student work and provide insight into correcting mathematical approaches in Multivariable Calculus and Modern Algebra for 80+ students.
- Serve as a liaison to help prepare the professor to address any shortcomings in students' understanding.

Program Assistant – Columbia University – Columbia Nano Initiative

June 2018-March 2019

- Reviewed research budget proposals prior to Dean's office approval. Processed grant subaward invoices with ARC/SAP platform, assisting financial managers with grant portfolio management and Principle Investigator (PI) reports.
- Reorganized purchasing and payment files for \$25 mn lab renovation.
- Full time employee throughout Summer 2018 and during college breaks.

LEADERSHIP EXPERIENCES AND CAMPUS INVOLVEMENT

Leadership: Head of Staff & TA – Hamilton Climbing Wall | President – Beekeeping Club | Vice President – Pottery Club

Extracurriculars: Marathon Canoe Racing Team, Tap Dance Club, Outing Club, Intramural Ice Hockey, Knitting