Annamira O'Toole

+1-617-710-0911 ♦ annamira@uname.net annamira.github.io ♦ annamiraotoole.com

PROFILE

Enthusiastic gap year student interested in math, computer science, and economics. Seeking opportunities in research and industry. Able to thoroughly work well under pressure and get along with all ages. Passionate about scuba diving and competitive sailing.

EDUCATION

Undergraduate Coursework (during high school) 2012 — 2018 Harvard, Harvard Extension School, Tufts Cambridge Rindge and Latin High School Class of 2018 4.67 Weighted GPA

COURSEWORK AND SKILLS

Mathematics Through multivariable calculus, linear algebra, statistics

Abstract algebra covering set, group, and ring theory

Science Physics, chemistry, and biology

Social Science Economics, game theory, comparative government

Political philosophy, American literature

Programming Languages Fluent in Java, Python, C++, and OCaml

Experience with HTML, CSS, and Javascript

Practical Unix and Linux command lines, LATEX, and Git/GitHub

Mathematica and Jupyter Notebook

Experience working and conducting research on an interdisciplinary team

Miscellaneous CPR/AED/First Aid certified, research integrity training from Harvard

WORK EXPERIENCE

Adjoint, Inc.

Boston, MA

Engineering Intern

August 2018 - Present

- Developed an implementation of the SHA256 hashing algorithm in Haskell in the form of an arithmetic circuit to be compiled and used for cryptographic protocols.
- Projects involved zero-knowledge proofs, Merkle trees, circuit compilers, and elliptic curve cryptography.
- Collaborated remotely with engineers in London, UK.
- Advisors: Dr. Stephen Diehl and Havell Rodrigues

Panama Jazz Festival

Boston Area

International Volunteer

August 2018 - Present

- Developed, organized, and managed artists, schedules, and content on the event website and app.
- Will travel to Panama City in January 2019 to teach in the festival's music therapy educational program.

MetroHacks Boston Area

Executive Director of 2017-18 Season, Current Board Member

August 2017 - Present

- Entirely student-run hackathon for New England high schoolers.
- Formulated the project timeline, goals, and community outreach for a nine person organizational team.
- Provided support for each sub-team: sponsorship, web design, logistics, and marketing.
- Recruited, interviewed, and trained new team of volunteers.

Harvard Institute for Applied Computational Science

Cambridge, MA

Research Intern

February 2017 - August 2017

- Scraped data, implemented Gaussian process statistical models for Boston area air quality, and assisted in the creation of an educational web interface.
- Collaborated on a five person team during the Harvard Data Science Research Experience for Undergraduates program.
- Advisors: Dr. Pavlos Protopapas, Dr. Weiwei Pan

References and full course transcript available upon request