

Education

- **Wesleyan University**, Middletown, CT. May 2021
– **Bachelor of Arts**, Double Major: *Computer Science* and *Mathematics*, GPA 3.84/4.00.
- **Trevor Day School**, New York, NY. June 2017
– High School Diploma

Work and Research Experience

- **University Research Fellow**, Wesleyan University, Middletown, CT Summer 2018
Developed an affine type system with a modality internalizing the affine structure and associated semantics. Created a translation into a language expressing program cost, and proved that the translation was correct with a logical relation. Research conducted under the supervision of Prof. Daniel Licata, extending his joint work with Prof. Norman Danner. The research continues through an Advanced Research Seminar.
- **Student Forum Leader**, Wesleyan University Spring 2018
Lectured on Haskell, alongside a grad student who had designed the course. Covered the functor/applicative/monad hierarchy, monadic parsing, monad transformers, and more. The course also included guest lectures on category theory by Prof. James Lipton.
- **Course Assistant**, Wesleyan University Spring 2018 - Current
Graded assignments, led tutor sessions, and aided with labs for the following classes:
 - COMP 212 - Computer Science II. (Spring 2018, Fall 2018, Spring 2019)
 - COMP 112 - Introduction To Programming. (Summer 2018)
 - WesMASS COMP 211 - Mini-Course Computer Science I. (Summer 2018)
- **Teaching Assistant**, Upperline School of Code, NYC August 2017
Helped students with coding assignments focused on web development in Ruby, and advanced frontend techniques.
- **Software Development Intern**, Flatiron School, New York, NY: Summer 2016/2017, Winter 2018
Worked on Flatiron School's online learning platform, Learn.co.
 - Optimized IDE usage monitor by writing highly parallel Elixir code. (Winter 2018)
 - Built a usage monitoring system for Learn.co's proprietary IDE. Fixed rendering problems with the frontend. (June - July 2017)
 - Built a system that automatically categorizes issue tickets with Python. Improved internal student progress analytics with ReactJS. (Summer 2016)
- **Teaching Assistant**, Flatiron School, New York, NY Fall 2014 - Summer 2015
Served as a teaching assistant for Flatiron School's pre-college program. Taught web development with Ruby, along with basic frontend. Courses ran on weekends during the school year, and weekdays during the summer.

Personal Coding Projects

- **Raytracer**: Wrote a raytracer in C++ utilizing Blinn-Phong shading and texture mapping.
- **Toy Language**: Used Haskell to make an interpreter for a simple functional language.

Skills

- Programming: Functional programming (Haskell, Standard ML, Idris), web development (Ruby, Rails, JavaScript, Frontend MVC Frameworks), \LaTeX , Lower level languages (C, C++).
- Other: Unix, Git, and Vim. Beginner knowledge of hobby electronics and Arduino. Conversant in data science methods - familiar with R and related tools.

Coursework Highlights

- CS: Computer Science II, Algorithms
- Math: Abstract Algebra, Linear Algebra, Discrete Math, Error-Correcting Codes