

EDUCATION

Brown University

Pursuing Bachelor of Science in Math May 2020

Selected Courses: Topology (Graduate), Complex Analysis, Reading Program in Category Theory, Topics in Abstract Algebra, Functions of Several Variables, Partial Differential Equations, Probability, Algorithms

Commonwealth School

Diploma June 2016

Selected Courses: Abstract Algebra, Theoretical Calculus, Mathematical Logic, Introduction to AI, Introduction to Compilers

EXPERIENCE

Tesla Motors

Firmware Intern Summer 2018

Developed software in Haskell to facilitate development of internal car network. Designed new algorithm for tracking redundancy and failure-resilience in communication components.

New England Complex Systems Institute

Student Researcher 2016-2017

Researched and implemented novel techniques in image processing. Wrote large-scale data scraping infrastructure. Helped to migrate large amounts of data. Studied novel information theoretic methods for modeling changes in complex systems. Worked in Python, R, and C.

Brown CS Department

Algorithms TA Fall 2018

Brown Math Department

Math Resource Center Tutor 2017

PROJECTS

HackMIT 2017 “Pathways”

Simulation of traffic routing algorithm to evacuate natural disasters. Won “Hack with Most Startup Potential” (prize: a trip to Las Vegas), “Best Use of Location Data,” and “Moonshot.” Written in Python.

Interactive Graph Editor

Keyboard driven extensible graph editor, purpose is to explore nonlinear syntax for programming language design. Written in Haskell. [owenlynch/ige](https://github.com/owenlynch/ige)

Not Gonna Happen

Web-based metronome that tracks your practicing habits. If you don't practice every day it's not gonna happen! Written in Haskell. [owenlynch/notgonnahappen](https://github.com/owenlynch/notgonnahappen)

TECHNICAL PROFICIENCIES



Haskell



C/C++



Python



Rust



NixOS



Linux



Git

INTERESTS

Category Theory and Applied Category Theory, Type Theory and Homotopy Type Theory, Algebraic Topology, Intuitionist Logic, Formal Verification, Algorithms, Differential Geometry, Learning New Things

MISCELANEOUS

I play violin in the Brown University Orchestra as well as chamber groups and pit orchestras, and I swing dance.