

EDUCATION

- **NYU, Courant Institute of Mathematical Sciences** New York, NY
B.A., Computer Science and Mathematics *Sept., 2017 – May, 2021*
Relevant Coursework: Data Structures, Computer Systems Organization, Basic Algorithms, Operating Systems, Discrete Math, Linear Algebra, Calc II-III, Computer Graphics, Artificial Intelligence, Machine Learning

EXPERIENCE

- **Google** Mountain View, CA
Software Engineering Intern *Summer 2019*
 - **Mapping Geo UGC:** Visualized Geo User Generated Content (i.e., reviews, photo contributions, edits) in Earth Engine. Visualizations included heatmaps and charts. Written in Javascript and fed data using Java and a Google-specific SQL. With the newly added visual element, identified trends and anomalies in the data.
- **Google CodeU** Mountain View, CA
Participant *Summer 2017*
 - **Chat:** Added to an existing Java chat server/client. In a team consisting of 2 other participants and a Google engineer, designed and implemented versioning, state saving, subscriptions, and access levels.
- **UCLA, Elegant Mind Laboratory** Los Angeles, CA
Researcher *Summer 2016*
 - **Neuron Mapping:** Developed MATLAB software to identify and chart the activity of the neurons of the C. Elegans worm in 2D & 3D.
 - **Preprocessing:** Implemented multiprocessing and other techniques to save up to an hour of time preprocessing images in the lab. Also automated it (until then it required preprocessing by hand).
 - **KJ Algorithm:** Responsible for the KJ algorithm, named after another researcher and myself.
- **Tesorio (Y Combinator S15)** Palo Alto, CA
Software Engineering Intern *Summer 2015*
 - **API:** Built the Python/Django internal API from the ground up.
 - **Dashboard:** Converted the dashboard front end architecture to React.js components. Some visualization development with Google Charts.
 - **Mailer & Backend:** Development of the mailer and Django backend. Communicated with a remote Philadelphia team weekly to coordinate efforts.
 - **Staging & Deployment:** Debugged pushes from development to staging to allow for clean production deployments.
- **Planet Argon** Portland, OR
Software Engineering Intern *Summer 2013*
 - **Github Dashboard:** Developed internal tool to track Github contributions (helpful to non-technical roles). Built with Ruby on Rails, implementing the Github API. Practiced Test Driven Development.
 - **Hydra:** Developed internal tool in Ruby on Rails. Practiced Test Driven Development. Used d3.js visualization.

PROJECTS

- **Homebrew-Bundle:** Rewrote the Ruby Domain Specific Language. Added support for homebrew-cask library. Since then, the project has been added to the main Homebrew github, and I was named as a contributor. Had the second most contributions to the repository.
- **Haystack:** Using MongoDB and Go, I built an API for processing payments, authenticating users, searching for listings by location and keyword. In addition, I built an Objective-C iOS application to interact with the Go backend API. Unfortunately, it no longer works with the termination of the Balance payment API, but I have plans to continue work on it.

AWARDS

- **HSHack Hackathon:** Won 2nd Place for an application called Tsh, implemented in Rails. Tsh allowed access to information like the weather, Facebook, etc all via SMS commands instead of a data plan. Implemented the Twilio and Facebook API (among others).
- **FTC (FIRST) Robotics:** Won Judge's Trophy. Acted as lead programmer.