Experience

Software Engineer Contract

TextQL

2023

- Two week contract
- Implemented custom Haskell to TypeScript code generation for all API calls and migrated much of the frontend to use them
- Eliminated the entire class of frontend/backend API contract synchronization issues in the process
- Significantly improved developer productivity and confidence in making API contract changes

Software Engineer

Academia.edu

2022

- Worked on a recommendation system that suggested user-relevant works from a corpus of 40 million
- Led an effort to use larger N-grams when comparing articles using TF_IDF via ElasticSearch
- Wrote backend for a project to provide recommendations using a linear regression based off of around a dozen factors, including article age, historical popularity, and user on-site engagement that meaningfully improved click-through metrics in a/b testing
- Diagnosed and presented on a major production problem involving increased "continue reading" sends

Associate Software Engineer

Fidelity Investments

2019-2021

- Completed the LEAP 4 month program for industry programming. Accepted into the Financial Projections team
- Developed technical and methodology changes to Monte Carlo financial simulations
- Implemented necessary changes to methodology on a RESTful web service used by several front-end teams and calling several other services for relevant calculations
- Co-wrote system to canary-test all services on planning and advice platform

Teaching Fellow

LaunchCode

Summer 2017

Web Designer

Contractor

Summer 2016

Education

B.S. in Computer Science

Carleton College

Graduated 2018

Classes of Note: Natural Language Processing, Computer Security, Networking, Evolutionary Computation, Graphics, Advanced Algorithms, Operating Systems, Applied Regression Analysis

Senior Capstone

2017-2018

- Software for Northfield Union of Youth, a drop-in center for at-risk youth
- Built tracking software for a range of requirements including attendance, activity participation, and staff comments
- Provided information to design improvements and enable leadership to extend funding with statistical evidence of results

Skills/Interests

- Programming Languages: Ruby, Typescript, JavaScript, Python, Haskell, Elm, Java
- Technologies: PostgreSQL, SQLite, Nix/NixOS, ElasticSearch, Angular, AWS (EC2, Route 53, S3), HTMX, HTML/CSS/Less
- Project Euler: An online repository of computer science problems (80+ completed)
- Personal Projects: Projects of note include a photo filter, a clone of the mac app Quicksilver, a Google Forms-style ranked choice voting website, and a terminal UI for the forum software Discourse