

Isaac Finken

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Minneapolis, MN

[GitHub](#)

[Portfolio](#)

[Linkedin](#)

Skills

JavaScript, React, Redux, Node.js, Express.js, SQL, PostgreSQL, Python, Flask, Alembic, SQLAlchemy, HTML5, CSS3, Mapbox GL JS, Git, Heroku, Docker

Projects

FruitFall

[live site](#) | [github](#)

JavaScript, React, Python, Flask, Alembic, HTML5, CSS3, PostgreSQL, Heroku, Docker

A crowd-sourced foraging app inspired by fallingfruit.org built with Mapbox API

- Integrated **Mapbox's** forward geocoding API within a **React** form to allow users to place and drag a marker on the map or search for a location and autofill geographical coordinates
- Utilized multiple **Mapbox** layers to cluster groups of nearby data points into selectable components to simplify user interface and navigation
- Structured application to eliminate reloading of **Mapbox** styles after initial page load for improved user experience

Stronklifts

[live site](#) | [github](#)

JavaScript, React / Redux, Express.js, HTML5, CSS3, PostgreSQL, Heroku

A workout tracking app inspired by the popular Stronglifts 5x5 mobile app

- Developed dynamic and responsive scatter plots from scratch using **JavaScript** and **SVG** that allows users to instantly see workout progress based on selected exercise(s) and date range
- Built a predictive algorithm that calculates a user's next workout based on previous performance
- Implemented simple and intuitive UI functionality on desktop and mobile using **React** and **CSS3**, allowing users to focus completely on their exercise and leave workout specifics to the application

While(single)

[live site](#) | [github](#)

JavaScript, React, Flask, Alembic, HTML5, CSS3, PostgreSQL, AWS, Heroku, Docker

A dating app inspired by OkCupid.com

- Constructed a user matching algorithm using **Python** based on a multiple choice questionnaire with three customizable parameters per question
- Utilized join tables and extensive back-end relationships in **SQLAlchemy** to improve speed and parsability of front-end queries
- Implemented **WebSockets** with **Socket.IO** to allow users to message their matches in real-time

Experience

Research Associate | CT Associates, Inc.

September 2013 - May 2020

- Assisted in the design, assembly, and operation of systems intended to assess purity, reliability, and/or lifetime of fluoropolymer chemical processing components
- Performed ISO and SEMI standard test methods, analyzed raw data, prepared presentations, and finalized test reports for Fortune 500 customers
- Developed and conducted a factorial experiment to characterize and optimize the absorption of various dyes in an anodizing process for Apple

Intern | Lightwave Photonics, Inc.

May 2013 - September 2013

- Simulated and optimized reflectivity of distributed Bragg reflectors of varying composition, reducing waste material
- Aided in development of novel gallium nitride epitaxial sputtering process to reduce costs and increase technological accessibility

Education

Web Development | App Academy

Fall 2020

Immersive 1000+ hour software development program with < 3% acceptance rate and a focus on pair-programming

B.S. Chemical Engineering, B.S. Chemistry | University of Minnesota - Twin Cities

Spring 2017

Notoriously rigorous chemical engineering program regularly ranked in the top 10 worldwide