

Skills

- **Languages:** JavaScript, Python, C, C++, Racket (Scheme), MATLAB/Octave
- **Web Development:** Express.js, NodeJS, React, Redux, jQuery, GraphQL, nginx, Mocha/Chai, Jest, Vue
- **Data/Machine Learning:** PostgreSQL, MongoDB, scikit-learn, NumPy, Pandas, TensorFlow
- **DevOps:** Jira, Git, Unix, Docker, TravisCI, Amazon S3, AWS ElasticBeanstalk, AWS CloudFront, GCP

Experience

ConsenSys Fullstack Developer

Jan 2019 - Apr 2019

- Built clean architecture endpoints over existing Node/Express API, allowing for framework-agnostic business logic and increasing developer efficiency by **~30%**
- Reduced test execution time by **~95%** by stubbing database calls in integration tests and increasing unit test coverage
- Created GraphQL resolvers over existing REST API to decouple frontend and backend workflows
- Improved frontend test coverage with Jest snapshot and pixel-match tests to ensure bug-free code

ConsenSys Frontend Developer

May 2018 - Aug 2018

- Built out application for tokenizing real estate on Ethereum, using Web3JS for on-chain interactions
- Constructed extensible React components such as dropdown menus and a ChartJS wrapper.
- Optimized Redux integration with StreamJS, increasing speed of notification reception by **~50%**

Projects

Music Genre Classifier <https://github.com/rocky1638/music-genre-analysis>

Apr 2019

- Designed and trained a neural network using TensorFlow/Keras to classify the genre of any song
- Optimized hyperparameters such as learning rate, momentum, and number of neurons using GridSearchCV
- Extracted and constructed input feature vectors from music metadata using Librosa

Movie Review Analyzer <https://mra.rockzhou.com>

Feb 2019

- Trained logistic regression classifier with feature-vectorized movie reviews using scikit-learn and NumPy, achieving sentiment classification accuracy **>95%**
- Implemented Flask API, nginx server, and React app with user feedback form, to allow for online learning
- Deployed with Docker, AWS ElasticBeanstalk and CloudFront

Sorcery a card game

Dec 2018

- Created a card game inspired by Hearthstone and Magic in C++
- Made use of object oriented decorator and factory patterns to optimize code reuse and maintainability

FoodDIY <https://github.com/rocky1638/fewd>

Sep 2018

- Created a responsive web-app that allowed users to post recipes, and view them conveniently while cooking
- Implemented a React/Redux frontend and PostgreSQL/Express backend, Amazon S3 image upload

Education

University of Waterloo Candidate for Bachelor's of Computer Science

2017-2022