Rock Zhou

(403) 542 3993 | rockzhou.com | rockzhou15@gmail.com

Skills

- **Languages:** JavaScript, Python, C/C++, Racket (Scheme), MATLAB
- **Web Dev:** Node.js + Express, React/Redux, Mocha/Chai, Angular.js, nginx, Flask
- **Data/ML:** SQL, MongoDB, NumPy, Pandas, PyTorch, Scikit-Learn, Tensorflow/Keras
- **DevOps:** Git, Unix, Docker/Kubernetes, AWS S3/EBS/CloudFront, TravisCI, Jira, GCP

Experience

Software Engineer @ KitchenMate — May – Aug 2020 in Toronto

- Increased projected revenue by 30% by expanding customer base to hospitals, through scoping out and building a full-fledged concierge app experience
- Created an internal asset management tool using AngularJS, streamlining operations processes and saving 10 total hours weekly
- Streamlined weekly inventory planning process by architecting and optimizing an inventory prediction model using TensorFlow/Keras
- Lead entire application redesign and styleguide creation in Figma, working with marketing and business teams

Software Engineer @ KitchenMate — Sep – Dec 2019 in Toronto

- Increased weekly average users by 5% by building a C2C2B referral program
- Decreased weekly food waste by 10% with a historical analysis tool in Jupyter Notebooks to evaluate inventory prediction scripts
- Improved customer satisfaction and saved culinary team 10 hours/week by analyzing meal success metrics and implementing a menu generation algorithm

Fullstack Developer @ ConsenSys — Jan – Apr 2019 in Waterloo

- Increased developer efficiency by building clean architecture endpoints over existing Node/Express API, allowing for framework agnostic business logic
- Reduced test execution time by 95% by stubbing database calls in integration tests and increasing unit test coverage
- Improved frontend test coverage with Jest snapshot and pixel-match tests

Frontend Developer @ ConsenSys — May – Aug 2018 in Waterloo

- Trimmed notification latency by 50% by optimizing Redux/Stream.js integration

Awards

EEG Seizure Classification — github.com/rocky1638/eeg-seizure-detection — May 2020

- Classified seizures through EEG frequency data, using transfer learning with ResNet18 for the Neureka 2020 competition
- Preprocessed data using Numpy and Pytorch, using STFT (Short Term Fourier Transform) to extract frequencies and amplitudes, creating frequency/time heatmap for CNN input
- Achieved classification accuracy of 70%, placing 4th among all participants

Projects

Doggin' Dog GAN — dogs.rockzhou.com — Aug 2019

- Trained and optimized a DCGAN on the Stanford Dog Image dataset, creating a CNN for generating, discriminating, and encoding images of dogs
- Created Flask API, nginx server, and React app with user feedback form to allow for further training with user input
- Deployed with Docker/docker-compose, AWS ElasticBeanstalk and CloudFront

FooDIY — github.com/rocky1638/fewd — Sep 2018

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

Education

- Bachelor's of Computer Science, 3.6 Cumulative GPA — 2017 – 2022

Interests

- Rocket League, Mechanical Keyboards, Music, Fitness, Photography