

TARIK GUL

(201) 937-9913

tariksnow37@gmail.com Software Engineer

[GITHUB](#)

[LINKEDIN](#)

Proficient SKILLS React, Redux, Typescript/Node.js, Express.js, MongoDB, Ruby, Ruby On Rails, Cryptography, Network Protocols, Unix, NGINX, Python, Django, GraphQL(Apollo), D3.js, React Native, HTML, CSS, SQL, Multithreading, Linux (Debian)

EXPERIENCE

SedimentIQ Software Engineer

July 2020 - current

- Responsible for creating a dashboard that visualizes upstream data from a GraphQL API using D3 and recharts.
- Implement GeoFencing with Django, GraphQL, and AWS Lambda functions in order to analyze and automate tracking for heavy machinery.
- Develop Speech Recognition React Native App/Prototype for verbal ticketing system for loud/large machinery.
- Increase performance and load time of large GeoJson data visually in React by 80%.

Parity Technologies Open Source Contributor

Oct 2020 - current

- Build better logging for accessing public block chain nodes on unsecure/secure websockets.

O2E Brands Senior Trainer

Aug 2014 - Sep 2019

- Trained over 100 Truck Team Members in the San Francisco Bay Area. Each team member served over 10 clients a day, maneuvering 6 ton trucks safely and on-time throughout the hills SF, while maintaining average NPS scores over 90.

PROJECTS

VIMEO FULLSTACK CLONE (Ruby On Rails, ReactJS, Redux, PostgreSQL)

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

Full stack clone of Vimeo, with Video upload, playback, and AWS configurations

- Integrate video uploading, with file handling and management by using the FileReader and FormData object. I was able to extract metadata from the file object, and store specific video features in the backend.
- Utilized BCrypt to receive the user password, and encrypt it so I could save it in the database as a password digest. Then used those model, and controller level validations to ensure and reset session tokens.
- Communicated with AWS in order to read, write, and delete videos, integrated React-player API.

INTERACTIVE SPEECH-RECOGNITION BOT: Cora (Python, Node, CMUSphinx, Raspberry-Pi)

[github](#)

Interactive speech recognition bot that will listen in the background, and respond to questions and deliver answers.

- Implemented Multithreading in python. I use my main thread as a python wrapper around a audio processing sub-thread that uses PocketSphinx, an offline speech-recognition library. My main python thread shares a Queue that decides when it should call upon the node bot for audio responses.
- Create an on boot CLI that allows for development testing, specifically for audio file uploading, and hardware testing.

COVID415 TASK VOLUNTEER (ReactJS, Redux, Express.js, MongoDB) #BuildCovid-19 hackathon Winner

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

Collaborated with a team of 4 in order to match those under self-isolation from COVID-19 with those who can help deliver supplies.

- Designed and normalized our data stream from our global state in Redux to our backend API.
- Implemented performant renders via hooks for mapbox API, and our user geospatial data.

SUDOKU ALGORITHM VISUALIZER (Javascript, Webpack, HTML, CSS)

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

Visualizes algorithms that solve an Exact Cover/NP-Complete problem, (BackTracking, Knuth's Algorithm X)

EDUCATION

Web Development - App Academy | Winter 2019 - Spring 2020

Applied Mathematics/Computer Science - Sonoma State University | 2014 - 2017