

TARIK GUL

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[GITHUB](#)

[LINKEDIN](#)

SKILLS

React, Redux, Rails, Javascript, Python, Express.js, Passport.js, MongoDB, HTML, C++, CSS, SQL, RSpec

PROJECTS

MERN COVID415 TASK VOLUNTEER (ReactJS, Redux, Express.js, Passport.js, Node, Mongo)

[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 them essential supplies.

- Selected winner of #BuildCovid-19 hackathon, hosted by Facebook/WHO.
- Created functional, and scalable user authentication by using Passport.js in conjunction with JWT, BCrypt and Express.js to create production-grade security and persist state across HTTP requests.
- Implemented a native geolocator in order to calculate and sort every task's distance from the current user to improve UX/UI. Using Turf.js, an SSL certificate, and native JS Geo API, I was able to update our global state, and sort after reaching the API endpoint.

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. Will read the file size, and extract video metadata in order to perform frontend handling before validating to be processed on the backend.
- Utilized BCrypt, model and controller-level validations for user authentication on backend. Implemented frontend user auth in Redux.
- Communicated with AWS in order to read, write, and delete videos, integrated React-player for video thumbnails, and Ruby on Rails for backend authentication.

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

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

Visualizes algorithms that solve an Exact Cover/NP-Complete problem

- Integrated dancing-links data-structure in conjunction with Knuth's algorithm X to optimize a Sudoku Solver using both a deterministic and nondeterministic brute-force method.
- Implemented a classical Backtracking algorithm to visualize a traditional brute-force method to find a solution.
- Generated sudoku boards that have a low probability of creating a board with more than one solution in order to optimize efficiency for Knuth's algorithm using a sparse matrix method to sort through possible solutions.

EXPERIENCE

O2E Brands 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 and side streets of SF, while maintaining average NPS scores over 90.
- Specialized in clearing homes of persons suffering from compulsive hoarding. Connected clients with the proper resources to get help, clean their environment, and aided communication with families properly to streamline home cleaning.

ACTIVITIES

Long Distance Hiking - Walked across America twice, and down the coast of California once | 2017, 2018

Robotics - Competed in multiple robotics competitions in early academic career

EDUCATION

Web Development - App Academy | Winter 2019

Applied Mathematics - Sonoma State University | 2014 - 2016

Relevant Coursework: Number Theory, Linear Algebra, Advanced Calculus, Complex Proof Analysis, Organic Chemistry

