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Michael Sova

github.com/red-starter
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Technical Skills

Strong: Javascript • Python • D3 • Node • Express • Socket.io • HTML • AngularJS • MongoDB • Mongoose

Experienced: Flask • Git • MySQL • Sequelize • Bootstrap • Heroku • Chai • Mocha

Projects

Beauty Stash | Fullstack Engineer | beautystash.io

Social web application utilizing big data for recommending and sharing beauty products.

- Designed and optimized a recommendation algorithm for 12,000 beauty products.
- Aggregated 522,000 user profiles through web scraping to implement an effective recommendation engine.
- Engineered a configurable decision tree view in D3 to enable users to explore their products effectively.
- Architected an asynchronous worker process to persist large scale computation in a non blocking manner.
- Carried out test driven development to ensure a robust code base and minimize regression.

Rapport | Fullstack Engineer | rapport314.herokuapp.com

Live chat client that pairs up users based on geolocation.

- Designed a database with MongoDB to access messages depending on the location of the user.
- Managed authentication with Express and MongoDB to provide persistent socket connections.

Moodlet | Fullstack Engineer | moodlet.herokuapp.com

Journalling platform that enables users to quantify and visualize their emotional patterns.

- Constructed an interactive graph in D3 and AngularJS to show changes in emotions over time.
- Implemented API routes on the backend with Sequelize and PostgreSQL to retrieve user data.
- Optimized graph with FakerJS to display data over different time ranges.

Real Time Data | Fullstack Engineer | github.com/red-starter/rTimeData

Online tool to simplify building SVG graphs.

- Crafted the frontend in AngularJS to enable users to submit a range of data models.
- Translated processed data into SVG graphs using D3.
- Displayed the processed data using D3 to easily visualize svg graphs.

Ising model | Software Engineer | github.com/red-starter/Ising-Model

Computational analysis of the physical properties of a 2D lattice of electrons.

- Manipulated data using Numpy and Scipy to obtain results for the properties of the Ising model.
- Constructed graphs using Matplotlib to showcase results.

Professional experience

Firetech Camp | Technical Tutor | 2014

- Designed curriculum and wrote lectures on the fundamentals of computer science.
- Instructed and tracked progress of students in Python and Java programming.

Education

Hack Reactor: Software Engineering Program - 2015
Imperial College of London: BSc Physics - 2015

Personal

I practiced and performed acoustic guitar for the past 7 years. I played ice hockey competitively. Ask me all about Czech beer.