KEYANG SUN

phone 925-858-7781   keyangsun@berkeley.edu   LinkedIn   Github   Angelist   Portfolio

SKILLS   Ruby, Ruby on Rails, JavaScript, jQuery, React.js, Redux, SQL, Git, HTML5, CSS3, MATLAB

PROJECTS

Fiestagram
Live Site | Github
A single-page social media web application created using Ruby on Rails, React, Redux, and PostgreSQL, where users can share, comment and like posts

- Improved application performance and prevented N+1 database queries by implementing eager loading and leveraging Rails Active Record associations for post and comment objects
- Created a fluid search feature using lodash debouncer, Rails routing, and the Active Record query interface
- Utilized AWS S3 for image storage to reduce server load, allowing for the app to scale gracefully
- Ensured user privacy through backend authentication. Used Action Controller filters, Active Record validations, and BCrypt password hashing, allowing users to only access certain CRUD operations on their personal posts when logged in

Consumers
Live Site | Github
An interactive visualization of the US net energy consumption created using JavaScript, HTML5, CSS3, and D3.js

- Improved UX with D3.js animated transition, allowing the user to interact with a dynamic dataset
- Developed a smooth UI by implementing informative tooltips using D3.js selections and mouse events

Goal Bucket (team project)
Live Site | Github
An original goal setting and goal accountability social web application created using MongoDB, Express.js, React, Redux, and Node.js

- Implemented RESTful API routes using Express.js for CRUD functionalities on goal objects, allowing users to set, track, increment and complete their goals
- Created backend routes on user objects with JavaScript Promise.all method to make sure multiple concurrent database actions are completed before sending back a response
- Collaborated with 3 other developers and practiced Gitflow workflow with code reviews and pair programming to quickly implement new features

EXPERIENCE

Research Assistant
Chevron Energy and Technology Company, Oct 2017 - Mar 2019

- Contributed to over 40 successful research projects related to gasoline product integrity and quality in the course of a year
- Practiced valuable interpersonal skills Interfacing with third party laboratories, vendors, and Chevron scientists on a daily basis to advance project goals and deliverables
- Eliminated repetitive data analysis procedures by creating MATLAB scripts to parse, reformat, analyze and visualize text file data of fuel thermo-oxidation generated from a custom in-house instrument
- Designed and implemented innovative laboratory sample preparation solutions to improve the resolution of ppb level salt detection in gasoline

EDUCATION

University California @ Berkeley - *BS - Chemical Engineering*   (Spring 2017)
App Academy - Immersive software development course with focus on full stack web development (Spring 2019)