KAVIAN MOJABE

P: 909-257-9757 kavianmojabe@gmail.com kavianmojabe.com LinkedIn Github

SKILLS

C/C++, Python, Java, JavaScript, jQuery, React.js, Redux, HTML, CSS, Ruby, Ruby on Rails, PostgreSQL, Verilog, MongoDB, D3.js

EDUCATION

Purdue University - *BS Computer Engineering, 2014-2018*

- Software Engineering Lab (Python/Bash), Operating Systems (UNIX, C), OOP (Java/C++), Algorithms and Data Structures (C++), Senior Design Lab (Embedded C/PCB/Agile), and ASIC Design Lab(Verilog)

App Academy - *May 2018 - Sept 2018*

- Intensive web development training program with < 3% acceptance rate

PROJECTS

LinkUp | *A Meetup clone built with Ruby on Rails 5.2 Postgresql SQL Node Webpack React.js Redux HTML CSS* **live | github**

- Implemented a Ruby on Rails backend which uses ActiveRecord to communicate with PostgreSQL and is deployed to a Heroku Server
- Utilized a single reusable react component for different rail models which allowed for an easily scalable project.
- Devised a user-authentication architecture which utilized libraries such as BCrypt to encrypt passwords and SecureRandom to store session tokens

Rabbit Hole Rescue | *(React/Redux, MongoDB, D3.js, Express, Node.js)* **live | github**

- Reorganized user history as a tree structure with the parent/children relationships based on user's browsing habits. Opening a new window would warrant a new tree node while opening a link creates a child to the previous webpage.
- Stored data from the chrome.history API in a MongoDB backend and rendered the tree structure with D3.js
- Devised a chrome extension popup that allows users to start/stop recording as well as provide a link to the RabbitHoleRescue website with customized user history trees
- Divided work between a team of four in a way to work asynchronously and implement a beta version of the website in under 10 days

Health Portal | *(Embedded C, I2C, Dallas 1-Wire, Microcontroller, RPi, HTML/CSS)* **user's site | team's site**

- Designed a tablet with a team of four that measured health data (i.e. heart rate) and communicated that data from a custom made circuit board to an online web portal
- Integrated health monitoring sensors with an STM microcontroller using I2C, UART, and a custom 1-wire communication system
- Divided work between a team of four asynchronously (embedded software, web development, PCB design, etc) but also implemented TDD to test other team member's portion of the project

Population Bubbles | *(Javascript, D3.js)* **live | github**

- Utilized the D3.js library to display the world population as series of circles which represent different countries. Radius of the circles correlate to the population of the country relative to world population.
- Contains a slider bar that allows users to view human population data based on different years. The slider bar adjusts the D3 object in real time and updates the current state based on year selected

EXPERIENCE

Product Marketing Engineer Intern

Texas Instruments May 2017 - Aug 2017

- Collaborated with the Catalog Processing team supporting new and existing products through competitive analysis, design decisions, market analysis, and success stories.
- Assembled a team of application engineers to further investigate how Sitara processors can adapt to the growing market of automated appliances and helped make significant design decisions. Motivated by communication with customers we added additional communication protocols to existing processors.
- Communicated holes in TI processors with other engineers by analyzing pricing differences, customer feedback, and success stories to further grow TI market share in areas like grid infrastructure

Undergraduate Researcher

Purdue University w/ Professor Shreyas Sen Jan 2016 - Jan 2017

IEEE: Characterization of Human Body Forward Path Loss and Variability Effects in Voltage-Mode HBC

- Modeled the human body as a communication network and investigated the possibilities of sending data through the human body as the medium of transportation
- Developed a procedure to minimize contact between a copper node and the skin (not to reduce signal) in an effort to measure data attenuation between nodes placed along the body
- Independently investigated the human body and relayed my finding to a small group of three in which we were successful enough to have a paper published to the Institute of Electrical and Electronic Engineers.