

SKILLS:

JavaScript, Python, HTML, CSS, React.js, Redux, Express.js, Flask, Node.js, PostgreSQL, Sequelize, SQLAlchemy, AWS S3, RestFul API, BEM, Docker, Git, Pug, Chrome Dev Tools, Mocha.js, Agile, Pair Programming, Visual Studio Code, nCode, Controller Area Network, SAE J1939, PTC Creo, Capital Harness Systems, Bilingual English/Spanish

SOFTWARE DEVELOPMENT PROJECTS:

Coffee Roasting

March 2021

[Live](#) | [GitHub](#)

A web app that is used to review coffee roasts and also purchase coffee

Environment: (JavaScript, CSS, React.js, Redux, Python, Flask, RESTful API, BEM, PostgreSQL, SQLAlchemy, AWS S3, Chrome Dev Tools)

- Integrated AWS S3 to store and retrieve images for profile and product showcasing
- Designed Redux store and reducers to improve efficiency in managing application state such as current user information
- Formalized a PostgreSQL database using SQLAlchemy to perform CRUD operations through Python classes
- Incorporated BEM for HTML classes to improve the readability of markup along with establishing reusability of CSS stylings

FireMoney

February 2021

[Live](#) | [GitHub](#)

A web application that helps users create and analyze monthly budgets

Environment: (JavaScript, CSS, React.js, Redux, Python, Flask, RESTful API, PostgreSQL, SQLAlchemy, Chrome Dev Tools)

- Defined and developed several React components along with React Hooks to manage component state and side effects
- Leveraged Redux to manage app-wide state and created actions for CRUD operations/state revisions to minimize the use of React component props
- Created wireframes/design to establish a vision for the application and to ease the implementation of website styling with vanilla CSS

DinoFlow

January 2021

[Live](#) | [GitHub](#)

A StackOverflow inspired web application where dinosaurs can post life-saving questions

Environment: (JavaScript, CSS, Pug, Express.js, RESTful API, PostgreSQL, Sequelize, Chrome Dev Tools)

- Constructed RESTful API routes to simplify routes for CRUD operations to the PostgreSQL database
- Collaborated in designing AJAX requests to perform asynchronous CRUD operations for a better user experience
- Set up web application security through session-based authentication and incorporating Bcrypt Hashing for encryption of user credentials

PROFESSIONAL EXPERIENCE:

Electrical Vehicle Systems Design Engineer

John Deere

Jan 2018 - Jan 2020

- Supported an Agile work environment with on-call responsibilities for production line audit troubleshooting
- Designed electrical systems for Golf and Commercial mowers, using CREO, Capital Harness Software, and SAE J1939 to ensure proper fit, form, and function for each machine
- Orchestrated software functional and regression testing for various revisions of software on vehicle controller units
- Updated product and software requirement documents based on new hardware and or software changes
- Communicated and worked with production line employees on manufacturing improvement processes
- Led development of custom solutions with suppliers for multiple projects
- Collaborated with various departments cross-functionally to determine design and test requirements for new product features

Performance & Reliability Engineer

John Deere

Mar 2017 - Dec 2017

- Orchestrated daily data analysis and reporting through excel, tableau, and nCode
- Defined, developed, and analyzed test cases across projects and products and conducted triage with internal clients on design improvements/test results
- Managed remote vehicle testing/maintenance procedures through constant communication/collaboration with test sites and personnel to ensure the quality of testing met company and vehicle standards

Test Engineer

John Deere

June 2016 - Mar 2017

- Led investigation on an experimental vehicle tracking solution that included constant communication with stakeholders and leadership, cost/benefit analysis, resource management, benchmarking, and metrics reporting. All of which ultimately lead to the approval of long-term testing with more samples of one product.
- Prototyped data acquisition tool to improve force gauge measurement procedure using Arduino and C++ programming that resulted in a reduced procedure time of 300%

EDUCATION/CERTIFICATIONS:

Johnson C. Smith University - *BS Computer Engineering, 2012-2016*

AppAcademy - Software Engineering Course, 2020-2021

Six Sigma Yellow Belt Certification

PROFESSIONAL ORGANIZATIONS:

National Society of Black Engineers, *2012-2020*

Society of Hispanic Professional Engineers, *2012-2020*

John Deere Toastmasters, *2017-2019*