JOEL ESTRADA

Seattle, WA 98106 | (253) 249-3170 | Email: jre.estrada@gmail.com | Portfolio: https://jre23.github.io/react-portfolio | LinkedIn: https://www.linkedin.com/in/joelestrada23 | GitHub: https://github.com/jre23

SUMMARY

Full Stack Software Engineer looking to leverage an extensive career in Aerospace Engineering to break into the world of Software Development. Experienced Avionics Systems Engineer who is seeking career and personal growth and who has earned a reputation for being detail-oriented, collaborative, and adaptable. Performs well in independent and team environments. Professional experience includes system requirements definition, verification testing, qualification testing, failure analysis, project planning, program management, and supplier coordination.

TECHNICAL SKILLS

- Visual Studio Code, HTML, CSS, JavaScript, Bootstrap, jQuery, Git, GitHub, APIs, Node.js, Express, Handlebars, MySQL, Sequelize ORM, MongoDB, Mongoosejs, Progressive Web Apps, Passport.js, React
- IBM Requirements Management DOORS, Zoom Video Conferencing, Microsoft Office Suite – Word, Excel, PowerPoint, Outlook, Teams

PROJECTS

Party Perfect | Link to GitHub: https://github.com/jre23/Party-Perfect **| Link to Deployment:** https://party-perfect.herokuapp.com

- Summary: Collaborated with peers to create a full stack application where users can plan out parties. The application utilizes React on the front-end and is designed with Bootstrap. Firebase is used for user authentication and the back-end consists of Node.js, Express, and MongoDB for data storage.
- Role: Back-end manager of API routes and MongoDB data storage.
- Technologies: JavaScript, Git, MongoDB, Mongoosejs, Express, React, Node.js, Heroku, Bootstrap, Firebase, FullCalendar, Cloudinary, Mapbox

React Google Books Search | Link to GitHub: https://github.com/jre23/google-books-search **| Link to Deployment:** https://react-google-books-search-jre.herokuapp.com

- Summary: Developed a full stack application that displays a list of books based on the user's search. The application utilizes React on the front-end and is designed with Bootstrap. The Google Books API is used for the book information and the back-end uses Node.js, Express, and MongoDB so that users can save books.
- Role: Sole author.
- Technologies: JavaScript, Git, MongoDB, Mongoosejs, Express, React, Node.js, Heroku, Bootstrap, Google Books API

Bear Share | Link to GitHub: https://github.com/jre23/bear-share **| Link to Deployment:** https://nameless-plains-06669.herokuapp.com

- Summary: Teamed up with peers to create a full stack application where users can search for and post teddy bears to sell. The application uses Handlebars on the front-end and is designed with Materialize CSS. Passport.js is used for user authentication and the back-end uses Node.js, Express, and a MySQL database for data storage.
- Role: Implemented the following features: search bar and search functionality, API route to delete a post in MySQL, API route to update a user's account details, form validation when users create a post.
- Technologies: JavaScript, Git, MySQL, Sequelize ORM, Express, Handlebars, Node.js, Heroku, Bcrypt.js, Passport, AWS S3 & Cognito, Multer & MulterS3, Tiny Cloud, JawsDB, Materialize CSS

WORK EXPERIENCE

Spectralux Avionics; Redmond, WA **July 2017 – December 2020**

Avionics Systems Engineer

- Created the Qualification Test Procedures used for the environmental certification of the Envoy Data Link (Envoy). Collaborated with teammates to create the Qualification Test Report based on Qualification Test results.
- Defined, validated, decomposed, and allocated numerous Envoy system requirements that are managed in the IBM Rational Dynamic Object Oriented Requirements System (DOORS) software tool which enabled component and system level integration testing.
- Successfully supported the development of the Envoy System Safety Analysis by: calculating the Mean Time Between Failure (MTBF) using PTC Windchill software, researching the failure mode distribution of each component of the Envoy using Quanterion FMD-2016 software, and helping create the Failure Mode and Effects Analysis (FMEA) of the Envoy using schematic analysis and engineering theory.

The Boeing Company; Everett, WA **July 2011 – March 2017**
Electronic and Electrical Systems Design Engineer

- Responsible for the program management of all aspects of the Ground Maneuver Camera System 2 (GMCS2) obsolescence program for the 777-300ER airplanes. Worked with the supplier on program scheduling, risk management, and communication with high level leadership.
- Lead the program through critical gates and major milestones by: presenting program status to upper level leadership, reviewing, distributing, and dispositioning important program documents, and conducting lab and airplane testing to debug failures.
- Provided technical oversight of the supplier for requirements development and design verification at the component, system, and airplane level to ensure expectations are exceeded.

EDUCATION

Certificate of Completion in Full Stack Web Development
University of Washington Professional & Continuing Education – Seattle Campus

- Coding Boot Camp

Bachelor of Science in Electrical Engineering
University of Washington – Seattle Campus

- Majored in Electrical Engineering with a focus on Power Electronics and Electric Devices, Sustainable Electric Energy, and Large-Scale Power Systems