

SAYRA LINETT RODRIGUEZ

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PROFESSIONAL SUMMARY

Front-End Software Engineer specializing in modernizing legacy UI systems and building scalable, component-based web applications. Experienced in JavaScript-driven architectures, API integration, and automated testing. Passionate about delivering performant, user-focused interfaces and continuing to expand expertise in React and modern front-end frameworks.

PROFESSIONAL EXPERIENCE

NOV – Houston, TX

SOFTWARE ENGINEER

Dec 2024 - Present

- Contribute to the modernization of legacy drilling system interfaces by translating C++-based UI components into scalable JavaScript-driven web architectures, improving maintainability and cross-platform support.
- Develop and enhance a reusable, component-based UI editor to standardize interface development across multiple SDK-dependent systems, improving scalability and developer efficiency.
- Implement interactive editor features including zoom functionality, dynamic slide-out component panels, and reusable layout components to improve usability and developer efficiency.
- Design and maintain automated unit tests using Jest and JUnit to improve deployment reliability and reduce regression defects.
- Collaborate in Agile cross-functional teams to design, test, and deploy high-quality features for complex industrial HMI systems.
- Researched and prototyped secure OPC UA communication using Open62541 and JNA to support reliable connectivity for HMI platforms.

SOFTWARE ENGINEER - PATHWAY ROTATIONAL PROGRAM

Jan 2023 - Dec 2024

- Adapted to three engineering teams, gaining experience across multi-platform software systems, testing, and debugging procedures.
- **UI Systems Team:** Implemented JavaScript components, executed automated tests with Jest, and replaced legacy architecture to improve scalability and maintainability.
- **Amphion Team:** Developed automation software with Ladder Logic and Structured Text; programmed SBCs in Java to deliver reliable, cost-effective control solutions.
- **NOVOS HMI Team:** Built and debugged Linux-based C++ UI features, resolved software defects, and performed simulation testing to validate system performance for rig operations.

Hynes & Khater – Houston, TX

SOFTWARE DEVELOPER

Mar 2022 - Jan 2023

- Built and maintained client-facing applications in an Agile environment.
- Enhanced application performance through debugging, testing, and iterative improvements.
- Collaborated with cross-functional teams to design and deploy scalable solutions.

TECHNICAL SKILLS

Front-End: JavaScript, React, Vite, HTML, CSS, Chart.js, D3.js

Testing & Tools: Jest (JavaScript), JUnit (Java), Azure DevOps, Git/GitHub

Back-End & Systems (Exposure): Java, Python, C, C++, REST API Integration, Linux, OPC UA (Open62541, JNA)

Other: Agile/Scrum, UX/UI, Figma

EDUCATION

University of Houston - Main Campus: **Bachelor of Science, Computer Engineering, with a Minor in Mathematics**

TECHNICAL PROJECTS

BUDGETING WEB APP - Front-End Developer

React, Vite, Context API, Chart.js, D3.js, Django API

Key Contributions Include:

- Built a modular, multi-page React app using Vite and Context API for global state management.
- Ensuring seamless integration of front-end components with backend API endpoints, enabling real-time data updates.
- Developed interactive data visualizations (Chart.js/D3.js) to enhance UX and provide actionable financial insights.
- Collaborated with backend engineer to deliver real-time updates and full-stack functionality.