

Lauren Felty

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TECHNICAL SKILLS

Technologies: TypeScript, JavaScript, Next.js, React, React Router, React Context, Angular, Babel, Node.js, Express.js, HTML5, SCSS, CSS, SQL, NoSQL (Mongoose, MongoDB), Python, Git, GitHub OAuth, Webpack, Vite, Material UI, Tailwind, Docker, HTTP, Chart.js, Redux, Matlab, Jest, Mocha, AWS, IAM, CloudWatch, DynamoDB, Amazon Bedrock

OPEN SOURCE PRODUCTS

WatchTower - DynamoDB visualization tool

Full Stack Software Engineer

- Optimized state management in a React application, ensuring that only necessary components were re-rendered to enhance the application's performance and improve maintainability.
- Enhanced user interface cohesiveness by integrating the MUI CSS framework, making strategic theming decisions and utilizing specific components to ensure an intuitive and consistent user experience, which significantly reduced development time.
- Developed visual data representations of the database's RCU and WCU using Chart.js, creating custom wrappers and abstractions to handle real-time database and user updates, ensuring the application remained lightweight and responsive.
- Leveraged AWS Bedrock AI capabilities to analyze user data and provide critical insights into a database provisioning levels, offering user specific advice to maximize AWS DynamoDB usage.
- Implemented GitHub OAuth to ensure secure and seamless user login and access management.
- Developed with TypeScript to maintain consistency throughout the codebase and reduce overall bugs before launching the application.

Wander Wise - Travel Planning Application

Full Stack Software Engineer

- Constructed a PostgreSQL relational database, utilizing features such as indexing and foreign keys to efficiently store and manage user-specific data to ensure efficient data retrieval while maintaining a secure and rigid database structure.
- Streamlined front-end and back-end communication by implementing Express.js middleware, strategically configuring routes and middleware functions to handle HTTP requests efficiently, and ensuring smooth data exchange.
- Compiled the application through Webpack to leverage its bundling and asset loading capabilities to automate the transpiling capabilities of the application.
- Integrated application testing through the use of Jest, developing comprehensive test suites to validate functionality, ensure code reliability, and facilitate continuous integration processes.

Pantry Partner - Pantry Inventory Application

Full Stack Software Engineer

- Engineered a non-relational database with MongoDB to store user's pantry items that efficiently retrieved the data when requested while allowing for a flexible and dynamic data structure.
- Customized a cohesive theme and branding for the application with the use of SCSS and its variable and nested rules to create a consistent application architecture.
- Ensure real time updates with the use of Node.js and its non-blocking I/O operation allowing for low latency for the user while deploying the application.

PROFESSIONAL EXPERIENCE

SLB (formerly Schlumberger)

July 2021 - March 2024

Mechanical Engineer

- Customized unique drill bits for global Fortune 500 clients at an accelerated rate of two weeks per design via Creo Parametrics and improved drill bit designs through FEA and CFD analysis with Ansys and automated Python scripts.
- Presented final design to Product Engineers, demonstrating improvement of ROP, erosion, and/or durability based on client stated requirements.

EDUCATION

The University of Texas at Austin

Graduated with High Honors, 3.8 GPA

Codesmith - Software Training Institute

Bachelor of Science in Mechanical Engineering

Minor in business through McCombs Summer Institute

Partnership with OSLabs

ADDITIONAL INFORMATION

Publications: "Front End Framework Alternatives" - Scismic Tech Talk Speaker Series (2024), "WatchTower — Making your DynamoDB Management enjoyable" - Medium.com (2024)

Interests: snowboarding, exploring new cities, pickleball, candle making