JACOB NEWELL

(760) 908-6024 | jnewell1820@gmail.com | GitHub | LinkedIn | Website

EDUCATION

Bachelor of Computer Science, Western Governors University July 2025

SKILLS

Languages: Java, Python, JavaScript, HTML, CSS
Frameworks/Libraries: React, Angular, Node, Express, Spring Boot, Flask
Databases: MongoDB, PostgreSQL
Tools: Git, Docker, Jira, Postman, Playwright, Azure
Certifications: ITIL 4 Foundation, Linux Essentials

EXPERIENCE

Software Engineering Intern July 2025 – September 2025
Treevah *Remote*

- Assisted in building front-end components using React.js and Redux, contributing to performance and usability improvements.
- Developed and tested REST APIs using Node.js and Express, with integration of Azure Blob Storage for secure data handling.
- Leading QA efforts by establishing test plans, bug tracking workflows, and manual validation strategies in an agile development cycle.

PROJECTS

Library Management System (React, Spring Boot, PostgreSQL, Stripe API)

- Developed a full-stack library management web application with a React frontend and Java Spring Boot backend following RESTful architecture.
- Integrated the Stripe API for secure online payments and fine processing, and implemented user authentication and role-based access control.
- Designed and managed relational data models with Spring Data JPA and PostgreSQL for tracking books, users, and transactions.

Social Media API (Spring Boot, PostgreSQL, JPA, MapStruct)

- Engineered a RESTful API replicating Twitter's core functionality with endpoints for user registration, tweeting, following, and hashtag tracking.
- Designed layered architecture with controllers, services, repositories, and DTO mappers (MapStruct) for maintainable code separation.
- Applied global exception handling, validation, and soft-delete logic to ensure robust error management and data consistency.

Customer Churn Prediction Model (Python, Scikit-learn, Pandas, Jupyter, Matplotlib)

- Built and evaluated a supervised ML model to predict customer churn using logistic regression on the Telco dataset, achieving 75%+ accuracy and AUC above 0.80.
- Cleaned and preprocessed real-world data with pandas, addressing missing values, outliers, and encoding issues to boost model performance.
- Created a performance dashboard that visualizes churn risk scores, model metrics, and driver insights to support business decisions.