TEJASWI AVULA

+1 (512) 537-8426 | t.avula.2712@westcliff.edu | LinkedIn | GitHub | Portfolio
Full Stack Software Engineer

SUMMARY

Full Stack Software Engineer with 3+ years of experience delivering end-to-end web applications across frontend and backend layers. Built Angular and React interfaces handling datasets of 50k records while designing and integrating Java-based REST APIs (Spring Boot) to support authenticated, data-driven workflows. Led Angular upgrades from version 14 to 17, improving maintainability and release stability. Owned UI, API, and data flows end to end, delivering measurable improvements in performance, reliability, and user experience across enterprise and product systems.

SKILLS

Frontend Engineering Angular (6–17), React, TypeScript, JavaScript (ES6+), HTML5, CSS3, SCSS, Bootstrap Component-Driven UI, Responsive Design, Cross-Browser Compatibility

Backend & API Engineering Java, Spring Boot, REST APIs Request/Response Flow, API Validation, Global Error Handling, Retry Logic Node.js, Express.js

State, Async & System Integration RxJS, Observable Data Flows, Centralized UI State Async Handling, Loading/Error/Recovery States

Data-Intensive UI & Data Layer AG Grid (Tree Data, Custom Cell Renderers, Editable Grids), Angular Material, Reactive Forms Large Dataset Rendering, Virtualization, Dynamic Tables MongoDB, Data Modeling, JSON Processing

Tooling, Debugging & Delivery Git, GitHub, GitLab, Angular CLI, NPM Chrome DevTools, Angular DevTools, Postman Agile/Scrum, Sprint Planning, Code Reviews

EXPERIENCE

Full Stack Developer **2022 - Present**
Sira Consulting Inc (Client: BNY Mellon) USA

- Owned end-to-end feature development across frontend and backend, delivering Angular and React user interfaces with Java Spring Boot REST APIs for 1000 users in regulated enterprise environments, owning requirements clarification, implementation, and production deployment.
- Designed and implemented data-intensive UI systems using AG Grid and RxJS, rendering datasets of 50k records per view while integrating backend APIs, optimizing change detection and data flow to improve render performance and maintain consistent UI responsiveness under heavy load.
- Designed and implemented Java-based REST APIs using Spring Boot supporting authenticated workflows, request validation, retry logic, and error handling, ensuring consistent data flow and frontend state during high-frequency updates.
- Implemented API interceptors and centralized error-handling mechanisms across frontend and backend boundaries, improving data accuracy and reducing production UI defects by 35 percent after deployment through standardized request and response processing.
- Led Angular framework upgrades from version 14 to 17, refactoring legacy frontend modules, modernizing shared components, and aligning backend API contracts to improve maintainability, reduce regression risk, and support smoother release cycles.
- Debugged and resolved production issues across UI and Java backend layers by analyzing logs and edge cases, partnering with QA and backend teams to stabilize releases and reduce production risk.
- Created and maintained technical documentation, including workflow diagrams, API specifications, and implementation notes, enabling efficient cross-team collaboration, smoother onboarding, and reliable knowledge transfer across engineering and stakeholder teams.
- Made frontend and backend architecture decisions to balance performance and maintainability, prioritizing modular UI patterns and stable API boundaries to reduce upgrade risk and production regressions.

Graduate Assistant – Computer Science **2021 - 2022**
Northwest Missouri State University Maryville, Missouri

- Mentored graduate students in building full-stack web applications, covering frontend component design, REST API integration, and backend handling
- Assisted students with debugging JavaScript-based applications, improving code correctness and reducing repeated errors across projects.
- Supported coursework involving backend logic and data processing, strengthening system-level problem-solving and software engineering fundamentals.

PROJECTS

ConverseAI - Real-Time Conversational Web Application **Jan 2026**
Tech: React, TypeScript, Java (Spring Boot), REST APIs, AI APIs

- Built a real-time conversational web application integrating a React frontend with backend AI APIs, managing asynchronous message streams while maintaining UI response times below 200 milliseconds during continuous interaction.
- Architected centralized conversation state and frontend–backend message handling logic, reducing redundant re-renders by 40 percent and stabilizing UI behavior during high-frequency message updates.
- Designed scalable, component-driven UI architecture with reusable components and predictable state transitions, improving maintainability and supporting feature iteration without regressions.
- Standardized async handling, error recovery, and API response validation across the system, reducing user-visible interaction failures by 35 percent and improving overall conversational reliability.

Quantix - Financial Trading & Portfolio Simulation Platform Project Link **Oct 2025**
Tech: React, Java (Spring Boot), REST APIs, MongoDB

- Developed a full-stack trading simulation platform with authenticated React dashboards and Java-based REST APIs, enabling users to manage mock portfolios and simulate market activity across frontend and backend layers.
- Designed API-driven frontend–backend workflows to support frequent portfolio updates, preserving consistent UI state and accurate data synchronization during rapid value changes.
- Optimized backend-driven rendering paths and frontend state updates, reducing UI frame drops by 45 percent during peak simulation activity and maintaining smooth user interaction

Wanderlust - Full Stack Travel & Property Platform Project Link **Dec 2025**
Tech: Angular, Java (Spring Boot), REST APIs, MongoDB

- Built a full-stack travel and property listing platform with an Angular frontend and Java Spring Boot backend, implementing authenticated user workflows, REST APIs, and MongoDB data models to support listing discovery, filtering, and management.
- Designed and implemented backend services using Java and Spring Boot for session management, secure route protection, CRUD operations, and request validation, ensuring reliable data handling across frontend and backend boundaries.
- Integrated frontend workflows with backend APIs and persistent data models, enabling end-to-end feature execution while maintaining clean separation of concerns and scalable application structure.

EDUCATION

Master of Business Administration - Web Development & Design **May 2025 - Present**
Westcliff University

Master - Computer Science (3.8 GPA) **Jan 2020 - May 2021**
Northwest Missouri State University