Henry A. Riley III

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SENIOR FULL-STACK SOFTWARE ENGINEER / FRONT-END ARCHITECT

Innovative and results-driven software engineer with over 20 years of experience designing and developing scalable, high-performance front-end solutions. Passionate about modern front-end frameworks and technologies, UI/UX design, and architectural best practices. Adept at leading teams, mentoring developers, and driving technical excellence. Please see my portfolio site link above, as it is much more detailed than this resume - especially the experience page.

TECHNICAL SKILLS

Front-End: JavaScript, TypeScript, Angular (js-18), RxJS, NGRX, Highcharts, HTML5, CSS3, SASS, Bootstrap, Material UI, Kendo UI, Tailwind, React, React Native, Redux, Vue.js, Nuxt, jQuery, KnockoutJS, JSONata

Test Automation: Jasmine, Jest, Playwright, NUnit

Back-End: C#, ASP.NET Core, Web API, Entity Framework Core, Node.js, Next.js, Nuxt

DevOps & Tools: Figma, Azure, Azure Pipelines, Docker, Webpack, Gulp, Git, TFS, VS Code, Visual Studio, VSCode

AI Tools: Copilot, ChatGPT, Ollama, n8n workflow automation, Deepseek R1,

Databases: MSSQL, PostgreSQL, Supabase, DB Visualizer, MS SQL Management Studio, Redis

And Many More...

PROFESSIONAL EXPERIENCE

Atlas Technology Group (Advantage Solutions) | Bentonville, AR

Lead Software Engineer & Front-End Architect (Nov 2016 - Nov 2023)

- Led the modernization of front-end architecture using Angular (7-13) and RxJS, improving application performance, reducing technical debt, and enhancing developer efficiency with a modular component-based framework; simultaneously acting as architect, lead engineer, and product owner.
- Designed and implemented a reusable front-end framework and component library, using Angular and Angular Material, to accelerate development.
- Developed dynamic data visualization dashboards integrating charts, graphs, and heatmaps, enhancing user insights and facilitating data-driven decision-making for retail analytics. Data visualizations were powered by Highcharts and the datasets were generated by our in-house reporting framework. Multi-layer caching was used to optimize workloads and delivery speeds. The caching was implemented using Redis on the server-side and IndexedDB on the client-side. Reports were run by our in-house ETL framework and utilized our ETL package dependency system to ensure daily data was properly integrated.
- Created a web-based, WYSIWYG dashboard designer for users to customize visualizations and dashboard

layouts. Responsive dashboards layout was achieved using custom CSS breakpoints and Gridster JavaScript library.
- Built a containerized development environment using Docker on WSL2 to create a consistent development environment and reduce onboarding time for new hires.
- Developed unit testing framework and test harnesses to reduce boilerplate code needed to effectively test front-end components; and established/documented unit testing standards, conventions, and best practices. Tests were written using Jasmine and the Angular Unit Testing libraries and were run as part of the CI/CD pipeline in Azure.
- Provided technical leadership, mentoring, and architectural guidance across teams.
- Established, documented, and enforced coding conventions and architectural guidelines for all front-end development across the organization; to encourage consistency, readability, and efficiency of the front-end codebase.
- Assisted project management and product owners in development, estimation, and pruning of requirements and backlogs.
- Participated in screening and interviewing processes for hiring new developers for the engineering team.

The Learning Institute | Hot Springs, AR

Director of Software Development & Lead Software Engineer (July 2012 - July 2016)

- Developed an online testing platform using ASP.NET Web APIs and Knockout.js, supporting 5M+ tests across 140 districts.
- Created a data-driven CMS for managing educational standards and assessment content. Content editing was implemented using ckEditor JavaScript library.
- Built multi-layered role-based authentication and authorization systems using ASP.NET Identity.
- Designed scalable reporting tools leveraging OData queries and ASP.NET Web APIs backed by LINQ-to-Entities.
- Designed and implemented web-based access control portal; facilitating the provisioning of access to various applications and features.
- Implemented a rule-based assessment system supporting multiple formats, including PDF and online testing. Leveraged Razor templating and CSS3 to dynamically generate PDF versions of assessment test content, enhancing flexibility and automation in test delivery.
- Established source control branching and merging policies, using Microsoft TFS.
- Implemented CI/CD build and deployment pipelines using JetBrains TeamCity.

Cities In Touch | Hot Springs, AR

CTO & Chief Software Engineer (July 2000 - Aug 2011)

- Designed interactive touch-screen advertising and digital signage solutions.
- Developed secure, PCI-compliant financial service kiosks integrating POS hardware.
- Created a centralized remote management system for a distributed kiosk network.

PROJECTS & ACHIEVEMENTS

- Spearheaded the front-end modernization of flagship retail analytics platforms.
- Designed a custom dashboard framework facilitating interactive, drill-down reporting; including a WYSIWYG drag-and-drop dashboard designer used extensively by the BI team at Atlas Technology Group.
- Implemented a scalable, rule-based assessment delivery system for educational testing; including a secure web-based test taking platform which presented tests and allowed students to enter their answers. Before I left TLI, 6+ million tests were submitted thru the platform.
- Developed a secure financial transaction system for self-service kiosks; interfacing with various types of esoteric hardware and enabling management via a custom, secure administration web application.

Hobbies & Interests

- 3D Printing – Highly experienced with almost a decade in the hobby and experience with a range of materials from PLA and PETG to Nylon and ASA and carbon fiber filled variants. I have several highly modified printers and could build a printer from scratch.
- CAD & Product Design – Several years of using Autodesk Fusion 360 to make functional 3D printed parts for many personal projects.
- Electronics & Robotics – Hobby level IoT experience; making things such as R/C radio receiver S-bus decoder, a homebrew servo using an automotive windshield wiper motor and a rotary encoder (code written from scratch), and an R/C rover with a pan-tilt camera for exploring tight spaces and sensors for things such as CO^2, natural gas, and temperature/humidity.
- CNC & Metal Fabrication – Novice welder and metal fabricator with a bit of milling/turning experience as well as metalworking tools such as bandsaws, angle/die grinders, and oxy-acetylene torches

REFERENCES

Available upon request