

Brad Mason

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Objective

Experienced frontend software engineer with a strong passion for building next-generation web applications that deliver exceptional user experiences. Eager to leverage expertise in modern technologies & cutting-edge web frameworks to build immersive digital experiences & lead development teams to success. Striving to mentor engineers, elevate their skills, and cultivate a culture of continuous learning & growth within the team.

Skills

- Frontend: JavaScript & TypeScript, React, Angular, Vue, SCSS & CSS
- Backend: Node.js & Express, C# & ASP.NET, Python & Django, PHP
- Databases: MongoDB, MS SQL Server, PostgreSQL
- DevOps: CI/CD pipelines, Docker, AWS, Azure, Datadog
- Tools: Git/Github, Visual Studio, VS Code, Bash, Powershell, Netbeans & Eclipse, Jira/Confluence, Figma
- Technologies: RESTful API design, Authentication & Authorization (JWT, OAuth, Cognito), WebSockets, Responsive Design, Cross-browser compatibility

Experience

Principal Software Engineer / “Principal Web Robot” @ Robots & Pencils Inc.

December 2018 – February 2025

- Delivered high-quality interactive web applications for clients across education, healthcare, and consumer technology sectors, utilizing frameworks such as React, Angular, & Vue.
- Collaborated with Project Leadership to define requirements, scope work, and provide accurate development estimates, ensuring projects met budget and timeline expectations.
- Designed and developed modular, reusable, and accessible frontend components, contributing to shared libraries and streamlining development processes across multiple projects.
- Optimized applications for performance, accessibility, & SEO, achieving measurable improvements in user experience and page load speed for client-facing applications.
- Built hybrid React applications with a focus on interactivity, usability, and scalability, enhancing customer engagement and satisfaction and improving codebase maintainability.
- Utilized Cypress for end-to-end testing, SonarQube for static code analysis, and eslint for linting, resulting in a reduction in bugs reported during development & improving release readiness.
- Mentored team members throughout the development lifecycle, providing technical guidance on frontend best practices, modern frameworks, and performance optimization.
- Fostered a learning culture through conducting knowledge-sharing sessions, code reviews, and pair programming exercises, strengthening frontend expertise across the team.
- Provided career and professional development guidance, helping teammates navigate growth opportunities, refine technical communication, and improve problem-solving approaches.
- Played a key role in the hiring process by conducting technical interviews and mentoring team members new to interviewing, providing constructive feedback to improve their skills and contributing back to internal hiring documentation.
- Contributed to internal initiatives, including the creation of shared frontend component libraries to speed up new project development, and conducting technical project demos of project successes to foster collaboration and knowledge sharing across clients.

- Built dynamic single-page web applications (SPA) using the Angular framework, delivering responsive and user-friendly interfaces to convey complex data.
- Customized and integrated open-source component libraries, such as Angular Material and Clarity Design System, to enhance UI consistency and meet project-specific needs.
- Created reusable, modular, and efficient front-end components, accelerating development cycles and ensuring adherence to design patterns.
- Wrote and maintained unit tests for front-end components, ensuring code quality and reducing regression risks.
- Collaborated with a remote, cross-functional team to gather requirements, prioritize tasks, and implement features, ensuring alignment with business goals.

- Refactored legacy codebases into a modern, scalable C# Web API using ASP.NET Core, paired with a front-end powered by the newly-released Angular library, improving maintainability and performance.
- Designed & developed a reusable Angular component library in TypeScript, standardizing UI functionality & look-and-feel across projects.
- Configured & deployed the component library as a private npm package on an internal Artifactory server, streamlining front-end development workflows and ensuring cross-project consistency.
- Applied the mediator pattern to create modular, decoupled back-end components, improving code organization and reducing dependencies.
- Leveraged Entity Framework to efficiently query and persist data, optimizing database operations.
- Wrote and maintained unit tests for both front-end and back-end code, achieving high test coverage and ensuring reliability across critical features.

- Led front-end development for a new online learning platform, built on Node.js & Knockout, enabling dynamic, data-driven UI updates with smaller, more efficient network payloads.
- Designed & implemented a modular drag-and-drop content creation system & WYSIWYG Markdown editor, streamlining course creation for educators & ensuring responsive, accessible course materials for students.
- Applied SOLID principles and MVC/MVVM patterns to create maintainable, testable, and extensible front-end code.
- Developed a dynamically brandable LESS-based styling system, allowing new education clients to fully customize their users' experience & reducing onboarding time from weeks to hours.
- Built & documented reusable front-end libraries for common UI components such as pop-ups and dropdown menus, standardizing interactions and accelerating feature development.
- Collaborated closely with back-end engineers to optimize API consumption, ensuring seamless integration between the front-end and back-end with minimal network overhead.
- Mentored junior developers & expanded front-end expertise across the team by establishing coding patterns, providing technical guidance, and fostering professional growth.
- Wrote unit tests to maintain an 80% test coverage rate for front-end modules, enabling rapid iteration with minimal regressions and ensuring long-term code stability.
- Authored comprehensive documentation on front-end architecture, workflows, & tools, streamlining onboarding and knowledge sharing across the team.

- Triaged, debugged, & fixed critical UI and rendering issues across the product's full stack, utilizing vanilla JavaScript & jQuery, and ASP.NET back-end technologies.
- Modernized front-end experiences by implementing the latest JavaScript practices & libraries, to improve the user experience, increase page interactivity, decrease page load times, & enhance cross-browser compatibility.
- Introduced SASS to team to streamline front-end development. reduce styling inconsistencies across pages & projects, and remove redundant code.

Education & Internships

Software Engineering Degree @ Penn State Erie

September 2006 – May 2011

- Studied at Penn State Erie, The Behrend College for a degree in Software Engineering.
- Worked at the Student Tech Support Desk, provided both hardware & software support to students for personal machines. Managed & monitored on-campus computer labs & assisted students.

Software Engineering Intern @ FMC Technologies, Inc.

February 2010 – May 2012

- Designed and implemented the product's next-generation web front-end for their flagship product, using PHP, MySQL, Apache, XML and JavaScript.
- Migrated legacy server-rendered web application to take advantage of more modern client-side web technologies to increase performance & interactivity.
- Built & maintained C/C++ tooling & documentation for working with proprietary binary file formats.
- Prototyped systems for small form-factor Linux & embedded hardware environments, & mobile applications using the Android SDK.
- Performed software tests and validation to ensure release quality, wrote & maintained test cases.