

Brent Mealhouse

JavaScript Developer

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<https://bmealhouse.dev>

I'm a Principal Software Engineer @ Abound, on a mission to build modern API solutions for 1099 tax compliance. I am passionate about web technologies, open-source, continuous delivery, code architecture/quality, and automation.

When I'm not building software, I enjoy golfing and spending time with my wife and two daughters at our northern Minnesota lake home.

SKILLS

JavaScript, TypeScript, Node.js, Vite, Vitest, Zod, AWS, SAM, SQS, DynamoDB, ElastiCache, Serverless, Nx, React, React Query, Next.js, styled-components, tailwindcss, React Testing Library, Rollup, ESLint, Prettier, MySQL, CI/CD, GitHub

EXPERIENCE

Principal Software Engineer, Abound

Apr 2021 – present

Architecture and development of Abound's API, UI embeddables, and government system integrations.

- Redesigned Abound's public-facing API with a focus on consistency and developer experience, using Zod schema validation and type safety to enforce data integrity
- Architected Abound's 1099 filing system, which processes large volumes of electronic filings, adhering to strict federal and state-specific requirements
- Built a real-time TIN verification system, using SQS for asynchronous verifications when the IRS is degraded or unavailable
- Significantly reduced AWS Lambda code size from over 20 MB per function to less than 20 KB per function
- Optimized our daily development workflow for fast feedback, easy code sharing, and improved reliability and confidence through CI/CD
- Created custom ESLint rules to ensure safe reads/writes in a multi-tenant system

Lead JavaScript Developer, Securian

Mar 2018 – Apr 2021 / Independant consultant

Mentored a small team of talented developers, building Benefit Scout – an educational tool that has grown to support 1.7M users and has directly contributed to \$5 million of Securian's annual enrollment revenue.

- Led full-stack development across several repositories using React, React Query, TypeScript, Node.js, Serverless, DynamoDB, and ElastiCache
- Regularly contributed to Securian's design system built with React, styled-components, and Storybook
- Deployed as often as possible through CI/CD using feature flags to keep our main branch deployable
- Created a robust integration test suite on top of Jest and React Testing Library with automatic mocking and client emulation
- Supported and enhanced our chatbot, Scout, using Amazon Lex and Amazon SageMaker
- Pair programmed or mobbed on stories when it provided value

Lead JavaScript Developer, Amano McGann

Jan 2017 – Feb 2018 / Independent consultant

Architecture for Amano McGann's future frontend platform and design system built on top of Next.js and styled-components.

- Developed a simple GraphQL proof of concept to aggregate data from REST services, a MongoDB data store, and client storage (in-memory cache)
- Built an interactive visualization using React, Redux, and SVG to help customers understand how to configure their parking rates
- Used Yarn workspaces to create small internal packages for reuse between projects

Lead JavaScript Developer, Best Buy

Dec 2014 – Nov 2016 / Independent consultant

Developed A/B tests across bestbuy.com to determine what features provide the best user experience and increase the overall site conversion.

- Transformed legacy A/B testing code into a maintainable architecture using Babel, Webpack, Node.js, and Karma
- Moved the A/B testing team to Best Buy's standard release management process, which reduced risk and provided more visibility for artifacts deployed to production
- Optimized development workflow for fast feedback and increased developer productivity
- Consistently evaluated dependency upgrades to ensure our team could leverage the latest features and prevent our stack from becoming stale

EDUCATION

Bachelor of Science, Software Engineering

Brown College, August 2010

Associates of Arts, Information Technology

Brown College, December 2005