

# 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 processed over 64,000 forms during the latest tax filing season (2023), adhering to federal and state-specific requirements
- Built a real-time TIN verification system that has processed over 695,000 verifications, 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 / Independent 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