

Casey W. Manion

Staff Full-Stack Software Engineer

541-595-8773 · casey@manion.com · linkedin.com/in/caseman · github.com/caseman72 · Bend, Oregon

Professional Summary

Staff Full-Stack Software Engineer with 20+ years architecting and migrating high-traffic applications in retail, real-estate, manufacturing, and automation. Deep expertise in React/Redux migrations from Angular, enterprise analytics and privacy-compliance rollouts, and full-stack systems from database to deployment. Currently building production applications with AI agent orchestration and the Model Context Protocol — six MCP servers, published to npm and in active use, alongside a live 50-state data platform. Track record in enterprise analytics, regulatory compliance at scale, and platform work on distributed teams.

Core Skills

- | | | |
|---------------------------------|---------------------------------|--------------------------------|
| • React 19 / Redux / Next.js 16 | • PostgreSQL, MySQL, SQL Server | • HTML5 / CSS3 / Tailwind |
| • Angular to React Migrations | • Docker / AWS (ECR, EC2) | • Git, JIRA, Agile/Scrum |
| • JavaScript (ES6+), TypeScript | • REST / GraphQL Integration | • Bash, Cron, Perl |
| • Model Context Protocol (MCP) | • Firebase / Real-Time Sync | • ESP-IDF / ESPHome / IoT |
| • AI Agent Orchestration | • Google Tag Manager (GTM) | • BLE & RF Reverse Engineering |
| • Node.js / Python / Kotlin | • Ruby on Rails, PHP (Zend) | • SCADA (Wonderware), SAP |

Professional Experience

Independent Engineering

Weylin Industries LLC - Bend, OR (Remote)

2025 - Present

- Built and deployed **CamVoy** (camvoy.manion.org), a production traffic-camera and weather platform covering all 50 states — ~55,800 live camera feeds and ~3,560 weather stations — by integrating 9+ undocumented state-DOT API platforms; Next.js 16 / React 19 / TypeScript on Docker and AWS ECR
- Scaled the platform from one state to nationwide in a single week by orchestrating parallel AI coding agents under a file-ownership convention that eliminated merge conflicts across concurrent workstreams
- Authored **six Model Context Protocol servers** and three API client libraries — six packages published to npm under @caseman72, the most-used at ~430 monthly downloads — plus four native Home Assistant integrations, enabling natural-language control of production hardware from Claude and other MCP clients
- Delivered a field-installed IoT build end to end: LoRa control system integrated with commercial gate hardware via reverse-engineered relay logic, AES-encrypted link with ACK/retry reliability layer, field-validated at 89 m and installed on site
- Contributed merged features to open-source projects including **Ghostty** (clipboard image paste, custom URL-scheme handler) and the pytryfi / hass-tryfi integration stack (GPS base-station update shipped across both repositories)
- Shipped a three-platform real-time application (Wear OS, Android, and web synced over Firebase) with tournament-bracket generation and unit test coverage

Staff Software Engineer

Sam's Club (Walmart Inc.) - Sunnyvale, CA (Remote)

2015 - 2025

- **Owned marketing instrumentation site-wide — and took it off everyone else's plate.** Abstracted the data and hooked the events behind a shared layer so the teams on **browse, search and category listings, product detail, cart, and checkout** could ship features without carrying marketing requirements in their code — I handled the marketing events and data end to end.
- Core contributor through the multi-year Angular to **React/Redux**/Electrode migration of samsclub.com (\$1B+ annual e-commerce revenue), run as a parallel-run cutover with legacy and rebuilt stacks live simultaneously — moving off the old app cut page loads roughly 40% with zero downtime
- Designed and owned enterprise-wide Google Tag Manager rollout (100+ tags) plus the CCPA opt-out flows, delivered ahead of the January 2020 regulatory deadline, and the GDPR consent gate on the site's international exports pages
- Improved marketing attribution accuracy 25% via analytics validation and real-time A/B testing

Senior Software Engineer

Trulia (Zillow Group) - Seattle, WA (Remote)

2012 - 2015

- Converted legacy Marketing Center to multi-page Angular SPA, increasing agent adoption 30%
- Rebuilt Silverlight media editor as cross-browser HTML5/Angular app, cutting dev time 50%

Software Engineer III

PV Powered (Advanced Energy) - Bend, OR (Hybrid)

2011 - 2012

- Built and led Ruby/Sinatra API + Rails portal for global solar inverter monitoring
- Created internal Backbone/Highcharts dashboard that reduced issue resolution time 40%

Senior Software Engineer & Earlier Roles

BlueMoon Ventures, Pike Street Industries, GEA Automation, Coca-Cola, Tektronix, and others 1999 - 2011

- Designed reporting systems, Zend migrations, Bing Maps integrations, SCADA/Wonderware automation, and SAP interfaces — plant-floor integrations where a failed sync meant no batches to run and the plant stopped
- Consistently delivered 30-70% efficiency gains through modular code and automation

Education

B.S. Computer Science, summa cum laude - Oregon State University

B.S. Chemical Engineering, magna cum laude - Oregon State University

Publication: Manion, C.W. & Quinn, M.J., "Java Applets to Promote Active Learning of Computer Science Concepts" — *IADIS International Conference e-Society*, 2006. First author, full paper.