

BEN DAMMAN

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A software engineer and technical leader who has delivered solutions across tech startups, Apple, Symantec, the U.S. Digital Service at The White House, and the State of California.

Technologies and Languages

Languages	Ruby, Elixir, TypeScript, Bash, Go, Rust, Python
Backend Technologies	Ruby on Rails, Phoenix, GraphQL, Oban, Sidekiq, Redis, PostgreSQL, RabbitMQ, Flask, Vector DBs, Docker, SQL, Serverless
Frontend Technologies	CSS3, React, Svelte, HTMX, LiveView
AI/ML Technologies	LLM Integration (OpenAI, Anthropic, FOSS), Fine-Tuning, Agents, Vector Embeddings, Knowledge Graphs, Optimization Algorithms, Context Engineering, Synthetic Data Generation, LLM Evaluation Frameworks
Others	AWS, Tailscale, Proxmox, Google Cloud Platform, RDF, Presentation Skills, Event Storming, Simulated Annealing, Genetic Algorithms, Docassemble, PrinceXML, Arch Linux, Git, U.S. Web Design System

Work Experience

Independent Consultant, Principal Software Engineer and Fractional CTO
Missoula, MT 04/2020 – present

- Delivered technical architecture and full-stack development across healthcare, hospitality, insurance, and nonprofit sectors.
- Led enterprise system modernization and scalable microservices implementations while mentoring development teams in modern software practices.

CMS.gov 'Chief Architectural Support Services for the Chief Technology Officer' Contract, 2020-2023

- Architected Knowledge Graph and data catalog solutions for enterprise data management and AI/ML initiatives.
- Developed Use Case Inventories and supported the CMS Explorer Program pilot projects, where CMS employees submitted their best application ideas for potential development and funding.
- Contributed strategic insights and practical recommendations to CMS technology policies and broader HHS policy documents.
- Launched ai.cms.gov as a central resource for CMS technology policy and governance information.

Marriott & Humana

- Contributed to Marriott's front desk modernization as tech lead—translating Figma designs into TypeScript services, implementing GraphQL APIs, and integrating real-time property data via Kafka streams.
- Developed a diabetes care mobile app backend for Humana using Elixir/Phoenix, including a recommendation engine that uses a simulated annealing algorithm and an achievement system implemented as PostgreSQL trigger functions.

SaaS & Startups

- Architected an API-driven SaaS product for Loss Run Pros automating insurance loss run report fulfillment as Fractional CTO.
- Refactored and upgraded a legacy Ruby on Rails application, deployed via Heroku PaaS, that multiple coworking spaces relied upon. Mentored junior developers.
- Pioneered career coaching product architecture enabling flexible model integration and testing across multiple service providers while maintaining consistent methodology through custom state machine control.
- Advocated the use of OKRs and KPIs for performance management.

Nonprofit & Community Organizations

- Contributed python code to a Django web application for DemocracyLab, a national non-profit organization.
- Service design and technical consulting to advance Start.coop's dynamic cooperative incorporation service; prototype created using docassemble.
- Developing sophisticated technical solutions for Missoula.org community platform.
- Technical consulting for Duluth, MN-based nonprofit organization on community relationship management solutions.

Seeq Corporation, Staff Software Engineer Missoula, MT (Remote) 10/2025 – 12/2025

- Full-stack engineer (TypeScript, Kotlin) on Seeq's successful decade-old SaaS analytics platform for industrial time-series data and machine learning.
- Collaborated across organizational levels—product owners, principal engineers, CTO, and CEO—to deliver features and strategic product ideas.
- Optimized NGINX connection pooling for 22% faster e2e tests; resolved build failures and flaky Playwright tests; built knowledge-sharing automation with GitHub Actions, Claude Code, and Slack.
- Merged code on day one, recruited a staff engineer, mentored two interns, and founded "New Hires Club" for peer support.

NewWave Telecom & Technologies, Program Director Baltimore, MD 09/2019 – 02/2020

- Led a 25-person multi-disciplinary team charged with delivering on a troubled \$24M MACBIS System Integration contract with the Centers for Medicare and Medicaid Services.
- Successfully turned the project around by clarifying program scope and recruiting uncommon talent from across the country to join the team.
- Strategically co-developed a Technical Direction Letter with CMS to re-align elements of this 'omnibus' systems integration portfolio of projects.
- Implemented DevSecOps practices and directed the development of team OKRs and KPIs for performance management and continuous improvement, educating my team and stakeholders along the way.

- Applied organizational change management principles and strategic planning in a highly complex, multi-stakeholder environment.

State of California, Digital Services Expert and Tech Lead
Sacramento, CA 07/2017 – 11/2018

- Successfully turned around multiple distressed government technology projects using skills developed during my time at USDS.

Assistant Deputy Director, Multi-Sourcing Integration and Digital Service Teams, CA-MMIS Division

- Executive responsible for correcting efforts to replace legacy Medicaid Information Management Systems using a modern, modular approach with a planned total expenditure of \$500 million.
- Provided leadership to the Project Management Office, Multi-Sourcing Integration and Digital Service Team division branches. Supervised three branch chiefs, 18 state employees, and several dozen consultants.

Motor Voter Implementation

- Provided product management and software development leadership to the Department of Motor Vehicles as part of a small strike team created by Governor Newsom.
- Developed and deployed multiple microservices from scratch, hosted on AWS, in less than nine months. Technologies included: Python, Elixir, PostgreSQL, React, NodeJS
- Coached DMV and CDT staff on modern full-stack software development practices, including database design, APIs, cybersecurity, agile practices, and digital service delivery.

U.S. Digital Service at The White House, GS-15 Digital Services Expert
Washington, D.C. 08/2016 – 06/2017

- Worked as a software engineer with teams of problem solvers to make government services simple, effective, and efficient.
- Performed an extensive rewrite of the GI Bill Comparison Tool, used by millions of veterans to explore their education benefits and school information. Two monolithic Ruby on Rails applications were broken down into smaller components using ReactJS to better align with the architectural goals of VA.gov and improve the user experience.
- Collaborated with many Federal agencies (including GSA, DHS, 18F, VA, SSA, NIST, OSTP, and OMB) on privacy, shared services, and technical onboarding for Login.gov.

Apple, Senior Software Engineer
Cupertino, CA 10/2013 – 07/2015

- Developed and maintained an AWS Console-like Ruby on Rails application used by Maps SREs and SAs to manage data and application deployments across all Maps data centers worldwide.
- Developed web-based tools and platforms necessary for high-quality software build, test, QA, and deployment at scale.
- Technologies used included Ruby on Rails, PostgreSQL, RabbitMQ, Redis, JavaScript
- Collaborated with multiple teams across Maps, iTunes, iCloud, and Radar.

Symantec, Lead Ruby on Rails Developer
Roseville, MN July 2012 – September 2013

- Lead developer and maintainer of an internal Ruby on Rails application used by over four hundred employees around the world. I write code and cross-train colleagues in Rails and JavaScript development practices.

Nouvant, Software Development Product Manager
Roseville, MN 05/2011 – 08/2011

- As employee #1 I led the Ruby on Rails rewrite of their early prototype (PHP). Nouvant offered a premium online platform for marketing and licensing intellectual property owned by universities and research institutions.
- Duties included recruiting contract and full-time development staff, some devops. I reported directly to the startup's CEO and Board of Directors. Assisted with technical due diligence when the company was acquired.

Early Career & Entrepreneurship, Founder, Developer, Community Organizer
Spooner, WI & Duluth, MN 06/1998 – 05/2011

- Founded Tachyon Technologies while entering high school (1998-2006), growing it from a website development business into a full-service computer store selling custom Windows PCs and providing IT services. Supervised two adult employees who later acquired the business.
- Founded and managed The Shotgun Collective Ruby on Rails consultancy (2006-2009), providing web-based product development services to East and West coast clients. Employed local programmers and managed offshore Ruby on Rails developers.
- Led Google Twin Ports Initiative community organizing campaign (2011), building a coalition of professionals, mayors, government officials, and volunteers to bring 1 Gbps Google Fiber to Duluth. Generated support from over 20,000 individuals (20% of the MSA) within five weeks.

Education

Autodidactic Polymath Some college, no degree; over 26 years of experience in challenging individual contributor and leadership roles.

Conference Talks

Hypermedia Middleware: Introducing Walrus (BigSkyDevCon, Bozeman), 2024

Presented a novel way to produce reactive, data-centric HTTP-based applications using blob stores.

Uncommon Architectures and Practices (Data Centric Architecture Forum, Fort Collins), 2023

Explored real-world implementations of data-centric patterns that challenge conventional application-centered thinking, including novel knowledge graph representations and software-code-as-data, emphasizing how modern data architectures are necessary to support AI initiatives.

Middleware for People (Minnebar, Minneapolis), 2013

Technical talk covering middleware architecture in HTTP systems, with Ruby Rack examples and uncommon integrations.

References

Ryan Maki, *Software Engineering Lead, Apple Inc.*

Ben is a visionary and knows that great innovations usually depend on doing things differently. He intuitively seeks new paths forward and novel solutions to problems. When you are doing innovative work, you must discover the solution in an equally innovative fashion, Ben knows this well and is willing to expend the effort to distill complex solutions to their most elegant forms.

His teams trust him because he fosters honesty with open and direct communication. He finds ways to help the people around him rise to difficult challenges and make a meaningful contribution to the world around them. While working with his team on innovative solutions he listens, challenges, and engages in healthy debate focused on the work at hand. Most importantly he is comfortable if proven wrong, adapts quickly, and commits to the decisions arrived at by his team.

While I worked with Ben, he was extraordinarily customer focused. He constantly raises questions about products from the perspective of the end user and always puts himself in their position. This focus on the user leads him to look for places where technology can be applied thoughtfully to eliminate a problem, not just for the sake of automating a broken process.

Ben's real superpower is knowing people. He makes introductions and builds large networks that he can tap for ideas and advice, to seek expertise and experience from a diverse group of experts he's kept in touch with throughout the years. He's curated an enormous network he can reach out to and find new ideas.

Stephen Widup, *Senior Build Engineer, Apple Inc.*

Ben and I worked together on the same team for the better part of 2 years. Ben is a passionate innovator driven to "move the needle" in a positive direction. His quest for excellence down to the detail level in his solutions versus "meets the requirements" sets him above the majority of his industry peers in my experience.

He has a great ability to perceive how a given solution might not just be used initially, but how it could evolve. He enhances this ability by ensuring he understands his customers' needs in depth by distilling the complex, and occasionally conflicting descriptions, down to simple actual end user needs. I'd highly recommend Ben to any employer and would enjoy working with him again in the future.

Dustin Getz, *Founder, Hyperfiddle*

Ben is a people mover. I watched him come into an org, identify the pain points, and then the pressure points that can be used to enact change. Map out the stakeholders and the management politics. Get everyone aligned and then execute. Combine this with a background in modern software development and it is a formidable force to deploy in your organization.

Ellie VanDyke, *Chief Operating Officer, AI Startup*

I recently had the pleasure of working with Ben at a startup and he blew my mind from day one. He's unlike any developer I've worked with, and the system he architected for us was on another level. I both hope and look forward to working with Ben again in the future.

Darren Cox, *Founder, Nouvant*

Ben was the first person I hired at CaSTT and he has easily proven to be the best hire I have ever made at any company. The things that make Ben unique are many and varied. Even though he is a coder, he understands the business reasons behind every line of code he writes and doesn't get bogged down in trying to fit a square peg in a round hole. Even though Ben is technically my employee, he takes ownership of everything he does and is as entrepreneurial as anyone I know, so he sees a problem and revels in fixing it. I see Ben as a partner in the success of our company and he works like it is his company instead of his job. He matches me hour-for-hour, does what he says he will and has unmatched integrity.

Most impressive is that even though to the best of my knowledge, Ben came to us without a ton of experience managing a team, he has hired and effectively managed a group of developers, and has proven himself an effective project manager as well as a natural people manager. He has an uncanny ability to be able to turn non-technical business strategy into technical tactics in a way that other developers understand. He is fantastic at translating my vision into usable technical specifications and keeping the rest of our development team working and productive (which is not the same thing at all) while also keeping our executive team apprised of changes and independently synthesizing new and better ways of doing things that ultimately save our company time and money. While I will hate to lose him, I look forward to the day that Ben starts his own company, so that I can watch as he takes over the world and say "I knew him when..."