



JEFFREY R. MILLER

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Engineering Leader | Driving Meaningful Impact Through Technology

www.humani.se

Seasoned startup veteran with 17+ years in web programming, product development, and engineering leadership. Proven in acquiring, managing, and mentoring multidisciplinary teams and developing FDA-regulated SaMD products. Full-stack Ruby on Rails expert, passionate about building scalable systems and engaging user experiences. Skilled in driving projects from concept through deployment, consistently aligning product and engineering with business goals to deliver impactful results.

Product & Team
Development

Compliance &
Regulatory

Strategic
Vision

AI & ML
Integrations

Budget/Resource
Optimization

WORK EXPERIENCE

COGNOA

Vice President, Engineering | Palo Alto, CA | Remote | March 2023 - Current

- Orchestrated cross-functional collaboration, driving a 10x increase in clinician adoption within 3 months through feedback loops and targeted process enhancements.
- Streamlined FDA-approved AI/ML SaMD release cycles by 75%, compressing cycle times from weeks to days by refining design controls and implementing ETL pipelines for test outputs.
- Guided engineering managers with agile practices (1:1s, stand-ups, retrospectives), accelerating delivery by 20% and expanding test coverage by 60% to ensure 80%+ platform-wide.
- Directed and secured ISO 13485 and SOC 2 Type II certifications, instituting robust compliance frameworks across teams, including mock audits and regular penetration testing.
- Trimmed annual engineering costs by over 22% (\$300k+) by renegotiating QA contracts, rightsizing services, optimizing AWS resources, and capitalizing on third-party bulk purchasing.

Senior Director, Engineering | Palo Alto, CA | Remote | July 2021 - March 2023

- Drove talent acquisition, scaling team size from 5 to 30 through HR collaboration on recruitment campaigns, interview standardization, and ATS automations.
- Achieved leading retention rates and lowest turnover company-wide by cultivating inclusivity, emphasizing performance management, and promoting open communication.
- Secured favorable vendor contracts for QA testers and developers, preserving quality standards and yielding \$150k in savings within the first year.

Director, Engineering | Palo Alto, CA | Remote | January 2021 - July 2021

- Enhanced productivity and promotion rates by fostering cross-functional alignment through strategic 1:1s, collaboration with peers and leaders, and targeted goal-setting.
- Modernized infrastructure by adopting Docker and ECS, automating CI/CD pipelines, and integrating real-time code analysis and monitoring tools, resulting in reduced bugs, enhanced performance, and improved customer satisfaction.

Lead Engineer | Palo Alto, CA | Hybrid | September 2017 - December 2020

- Collaborated with data science, clinical research, and regulatory teams to develop and execute clinical validation trials, securing FDA Breakthrough Device designation.
- Produced high-quality, HIPAA-compliant products by coordinating cross-functional teams and utilizing Kanban-style planning tools and routine security reviews to meet tight deadlines.

Senior Software Engineer | Palo Alto, CA | Hybrid | August 2015 - August 2017

- Pioneered backend infrastructure as the sole full-stack engineer for web and API layers, supporting iOS, and Android platforms, optimizing performance and reliability.
- Engineered scalable data models, APIs, and web interfaces, achieving peak performance and seamless platform integration.

FUNNY OR DIE

Software Engineer | San Mateo, CA | Hybrid | March 2013 - August 2015

- Constructed and sustained interactive features on FunnyOrDie.com, attracting over 20M unique visits and nearly 65M video views monthly through user engagement.
- Designed and implemented a high-traffic on-site activity feed system backed by Redis, processing millions of interactions monthly and significantly boosting user engagement.
- Launched popular parody sites such as what-name.net and scienceology.fm, broadening the brand's creative reach and appealing to a global audience.
- Contributed to the successful August 2013 site redesign and relaunch, enhancing performance and user experience through improved UI and backend optimization.

COVERHOUND, INC.

Software Engineer | San Francisco, CA | Hybrid | August 2011 - February 2013

- As the first engineering hire, developed the industry's first real-time home and auto insurance comparison platform using Ruby on Rails, enabling instant, actionable rate delivery.
- Led end-to-end product development from feature inception to integration, managing design, engineering, and ops roles to ensure rapid, high-quality delivery in a dynamic startup setting.
- Devised front-end design and constructed scalable infrastructure to support rapid growth, ensuring a seamless, top-tier user experience for customers and agents.

RENASCEANCE IT CONSULTING

Software Developer / Network Technician | Newark, CA | Hybrid | January 2011 - August 2011

- Delivered on-site and remote technical support, asset management, and 24/7 monitoring for 30+ Bay Area clients, ensuring reliable and optimal system performance.
- Established the company's first web design and custom application services, leading the design and development of projects on LAMP and Ruby on Rails stacks.
- Custom-designed and built desktops tailored to client needs, optimizing performance and cost for diverse business applications.
- Managed virus and malware prevention and removal, implementing security protocols to safeguard client systems effectively.

ASTREYA PARTNERS

Technical Support Associate @ Google, Inc. | Mountain View, CA | On-Site | June 2010 - September 2010

- Provided Level 1 and 2 tech support across Google's Mountain View TechStop locations, managing hardware deployments, software installations, and device and network configurations.
- Supported diverse OS environments (Windows XP/Vista/7, macOS, Linux/Ubuntu), ensuring seamless user operations through proactive troubleshooting.
- Ensured data security by implementing advanced encryption tools, including PGP, SGEasy, FileVault, and BitLocker, for secure network operations.

XOJET

IT Support Specialist & Software Engineer | San Carlos, CA | On-Site | July 2006 - May 2010

- Delivered enterprise-level IT support across multiple locations, managing ticketing systems and developing custom software solutions to streamline internal operations.
- Developed a Ruby on Rails-based sync system for Active Directory to Blackberry contacts, boosting user connectivity and recognized as "leading edge" by the CIO.
- Designed and QA-tested financial reporting and reliability analysis systems, achieving high accuracy in reports exceeding \$20M.
- Oversaw the management, repair, and deployment of all computer and mobile assets, ensuring reliable and cost-effective tech support for employees.

EDUCATION

Zero to Deep Learning

UC Berkeley, Francesco Mosconi

- Completed intensive, hands-on training in deep learning concepts, including CNNs, RNNs, model evaluation, and deployment techniques.

Notre Dame Du Namur University

B.S. Computer and Information Science, Software Engineering

- Received an outstanding academic achievement award, graduating Summa Cum Laude with a 3.92 GPA.

VOLUNTEERING

Mentorship

STEM NOW @ San Jose State University | October 2014 - April 2015

- Facilitated two beginner Ruby on Rails workshops for STEM NOW, an organization focused on providing networking and mentoring opportunities for women. These workshops introduced students to modern web technologies as an alternative to Java.

