JEFFREY R. MILLER

Engineering Leader | Driving Meaningful Impact Through Technology

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Seasoned startup veteran with 15+ 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.

WORK EXPERIENCE

JIGSAW DIAGNOSTICS
Advisor, Engineering | Menlo Park, CA | Remote | May 2021 - Current
- Developed foundational MVP of **telehealth platform and EHR**, architecting core features to streamline healthcare delivery and **recruiting an engineering team** to support the platform's scalability and future enhancements.
- Directed compliance efforts for complex regulatory requirements, leveraging in-depth **expertise in HIPAA standards** to ensure platform-wide adherence.
- Mentored and guided engineering team members, **fostering a collaborative, growth-oriented environment** focused on continuous learning.

COGNOA
Head of Engineering | Palo Alto, CA | Remote | September 2017 - October 2024
- **Directed growth of the engineering team from 5 to 30**, leading recruitment, onboarding, and performance management, resulting in high retention rates and minimal turnover.
- **Oversaw budget and resource allocation** to reduce engineering expenses by 22% ($300k+), optimizing third-party vendor contracts, AWS costs, and QA services.
- **Established and enforced FDA and HIPAA compliance** within AI/ML SaMD development, implementing robust security protocols and regulatory frameworks to meet and exceed compliance standards.
- **Managed timelines and cross-functional collaboration** for FDA-approved releases, reducing cycle times by 75% through refined design controls and efficient ETL processes.
- **Accelerated delivery by 20% and expanded test coverage by 60%** by guiding engineering managers with agile practices (1:1s, stand-ups, retrospectives) and effective goal-setting.
- **Achieved ISO 13485 and SOC 2 Type II certifications**, leading comprehensive mock audits and penetration testing to build a strong compliance foundation for scalable, secure product development.

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 while balancing optimizations for **rapid development**, **performance**, and **reliability**.
- Engineered **scalable data models**, **APIs**, and **web interfaces**, achieving peak performance and seamless platform integration.
- 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.
- Collaborated with data science, clinical research, and regulatory teams to develop and execute clinical validation trials, **securing FDA Breakthrough Device designation**.

Key Highlights

- Built multiple healthcare platforms **from the ground up**
- Deep expertise in **Ruby on Rails**, **JavaScript**, **& system architecture**
- Thrives in **fast-paced, resource-constrained environments of early-stage startups**
- Strong focus on **compliance, regulatory, and quality**
- Experienced in **talent acquisition**, **performance management**, and **agile methodologies**

Technical Skills

- **System Architecture & Scalability** (Cloud Infrastructure, AWS, Azure)
- Data Modeling & Database Management
- Microservices & High-Availability Systems
- **Software Development** (Ruby on Rails, JavaScript, Node.js)
- API Development & Integrations
- **DevOps & CI/CD** (Docker, ECS, CircleCI, GitHub Actions, monitoring & logging)
- **Compliance & Quality** (FDA, HIPAA, ISO, SOC2)
- Agile & Lean Methodologies
- Product Roadmapping & Feature Prioritization

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.
- Collaborated on 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.

EDUCATION

NOTRE DAME DE 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.

LINKS

LinkedIn	linkedin.com/in/ibanez270dx
GitHub	github.com/ibanez270dx
Website	humani.se

Management & Leadership Skills

- **Team Building & Acquisition** (Recruiting, onboarding, managing cross-functional and distributed teams)

- **Mentorship & Development** (Building a growth-oriented culture, skills development, mentoring programs)

- Cross-functional Collaboration

- Performance Management

- **Stakeholder Alignment** (C-suite, board members, and external partners)

- **Technology Strategy & Innovation** (Developing technology roadmaps, exploring emerging technologies)

- **User-Centric Development** (Emphasis on user experience, incorporating customer feedback)

- Risk Assessment & Problem-Solving

- **Change Management** (Scaling, reorganization, and process implementation)

- Budget & Resource Management

Volunteering

Mentorship
STEM NOW @ SJSU

Conducted two beginner Ruby on Rails workshops for STEM NOW, introducing students to modern web technologies as an alternative to Java and supporting networking and mentoring for women in STEM.

Other

Zero To Deep Learning
UC Berkeley, Francesco Mosconi

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