HOWARD STEARNS

PROFESSIONAL SUMMARY

Results-driven professional with a strong background in developing and maintaining software solutions. Adept at troubleshooting and resolving software issues to ensure the stability and performance of products. Skilled in designing and developing unusual applications with a focus on scalability and safety.

EXPERIENCE

Senior Developer
2021 - 2024 | Linden Lab (Second Life), San Francisco

Spearheaded development for a mobile app and a streaming-Web prototype, collaborating with external teams to enhance user engagement in a virtual world with over 50M users.

Lead Developer
2015 - 2021 | High Fidelity, San Francisco

Managed a team of senior engineers to optimize avatar data handling, achieving record synchronization of 600 concurrent animated avatars from one server, and 3000 users in one audio space, at Philip Rosedale's VR metaverse.

Deployed the first NFT marketplace in the metaverse, with a blockchain payment system for user-generated content.

Developed and iterated on prototypes for innovative features in user safety and content discovery, integrating UI tools and persistence models to address immediate and future scalability needs.

Owned multiple product features, defining requirements in collaboration with users and iterating over multiple deployments produced by my team.

Consistently prioritized high-impact tasks that aligned with user needs.

Developed a modified Agile approach, identifying specific business outcomes for each two-week sprint, consistently delivering on-time throughout over four years.

Senior Developer / Lead
2014 - 2015 | Shocase, San Francisco

Led the prototyping and production of a new-user portfolio collection mechanism, managing a cross-functional team that harvested 100K+ portfolios, significantly boosting the platform's user engagement and the new-user experience.

Senior Developer / Lead
2011 - 2014 | TuneUp Media, San Francisco

Collaborated closely with product management and other teams to re-architect a metadata correction system for nine million users, enhancing user experience in personal music collections.

Senior Application Lead
2011 | HP WebOS (Palm), Sunnyvale, CA

Delivered Palm's most complex mobile app (email) and managed our first Agile and test-driven development.

Identified and developed a "missing app" (calculator) for the tablet launch, augmenting product offerings and user experience.

CONTACT

📞 650-817-5956

✉ stearns@alum.mit.edu

📍 Redwood City, CA 94062

SKILLS

Adept with Wacky Tech: Multi-user realtime distributed systems, VR, blockchain, symbolic AI, embedded….

Technical Manager: Proven track record in product-oriented development, technical leadership, apropos innovation, and team mentorship, with a high rate of re-employment among colleagues.

Language Polyglot: Used over dozen languages professionally, including C++, C#, Javascript, and also wrote low-level native extensions for NodeJS and Smalltalk, and an entire ANSI standard Lisp implementation.

Opportunistic Framework Consumer: Express, Rails, React, Angular, Material Design, Unity.…

Passionate About Results: Self-directed with extensive experience in cross-functional team collaboration. On-time delivery of prototype-through-product iteration via modified Agile methodologies and test-driven development.

Effective Communicator: Ability to simplify complex problems, crafting functional solutions and collaborating with industry thought leaders.

Annotated resume with publications and open-source at
alum.mit.edu/www/stearns

Member of the Technical Staff
2007 - 2011 | Teleplace (Qwaq), Redwood City, CA

Delivered multiple diverse features in enterprise virtual worlds on the Croquet platform, including bandwidth-efficient avatar animation on 2005 hardware without a graphics card, enabling operation over edge cellular networks.

Delivered an innovative mobile streaming app for collaborative meetings.

Lead Developer
2004 - 2007 | University of Wisconsin, Madison, WI

Managed the university's team for Alan Kay's cross-institutional Croquet Project for multi-user virtual worlds.

Drove funding by leading the team to produce the first virtual world classroom experiences, integrated with the university's learning systems and pedagogy.

Completed a successful contract with a Japanese government agency.

Published an innovative interactive language for non-programmers using symbolic AI techniques.

Applications Consultant
2003 - 2004 | Engineering Intent, Waltham, MA

Delivered rule-based applications with clients on-site and in remote office, lining up customer wins in advance of acquisition by Oracle.

Technology Strategist
1999 - 2002 | Curl, Cambridge, MA

Identified technical strengths and developed applications for Tim Berners-Lee's rich internet application model, reinforcing competitive positioning in the market.

Developed the language specification and produced an interactive architectural tour, strengthening product visibility and understanding.

Transitioned from application engineer to strategist, promoting innovation within the organization.

Technology Director
1992 - 1999 | Elwood, Oak Creek, WI

Developed low-level system software and factory automation controls, driving innovation in the artificial diamond market.

Produced all aspects of the Eclipse Common Lisp system from concept to new industrial customers for Elwood.

Manager of Applications
1987 - 1992 | ICAD, Cambridge, MA

Prototyped and architected a smart integration between our rule-based 3D expert systems and external CAD systems, subsequently creating a team around this initiative with 13 products.

EDUCATION

Massachusetts Institute of Technology, *Cambridge, MA*

B.Sc. Ocean Engineering | 1986
B.Sc. Electrical Engineering | 1987
Humanities Concentration: Economics