

Thirty-year-plus computing veteran looking to lead a team working on making the world better.

My experience ranges from solo coder to Silicon Valley executive, from bringup on bare metal to mobile UI, and from low-key mentoring sessions to full-bore crisis management around the world. I'm known for combining exceptional technical expertise and an outstanding breadth of knowledge with excellent communications, mentoring, and problem-solving skills.

Strengths

- Architect, design, and implement robust, high-performance, scalable, secure solutions to complex problems, whether working from a clean sheet or diving into a million lines of existing source.
- Solve problems in complex systems, even while managing crisis situations.
- Communicate effectively in a wide range of situations, to a wide range of audiences.
- Provide leadership and mentoring where needed.
- Adapt readily to new technologies, while retaining what's useful in older technologies.

Technologies

- Extensive experience with:
 - (in alphabetical order) C, CoffeeScript, C++, Java, JavaScript, Objective-C, Perl, Python, shell, SQL, etc.
 - iOS native development and cross-platform hybrid mobile development
 - UNIX development and administration from System III forward, notably including MacOS and Linux
 - Database and SaaS platforms (including MySQL, PostgreSQL, Parse.com, Salesforce, etc.)
 - Internetworking, including performance, security, and protocol design, using both IPv4 and IPv6
 - Internet messaging
- Familiar with Android development, Django, LISP, PHP, Ruby on Rails, etc.

Career

Prompt.ly, Inc.**2014-present****Head of Development**

- Lead the team creating a cross-platform mobile application for solopreneurs to better manage their businesses. Responsibilities include:
 - Own development of the handset application (JavaScript/HTML/CSS under Forge) and the backend server (JavaScript on Parse.com)
 - Manage the development pipeline, working with the C-suite and the product management team;
 - Keep the team working smoothly: mentor and prioritize as needed, clear obstacles where possible;
 - Create and manage processes around source control, repeatable builds, deployment, and updates; and
 - Ensure security and performance of handset/server communications.
- Individually design, implement, and support tools and code as needed. Examples include:
 - Rewrote much of the core of the handset application;
 - Moved the application from callback architecture to promises, dramatically improving code reusability;
 - Created the module system that allows code sharing between handset and server; and
 - Created and maintained the build system.

Basis Technology Corporation**2011-2014****Principal Software Engineer, Digital Forensics**

- Provided technical leadership for a team creating tools for forensic analysis focused on mobile telephones.
 - Examples include SQLite data recovery, Symbian data logging, etc.
- Individually designed, implemented, and supported tools as needed. Examples include:
 - Decryption/extraction of iOS device backups;
 - Forensic analysis of iOS data using a graphical Macintosh application;
 - Reverse engineering dumb phone data; and
 - Cross-platform GUI applications to normalize, manipulate, and compare cell phone data.

iFan Media Corporation**2010-2011****iPhone Development Lead**

- Developed iFan Media's mobile social media application platform, which enabled quickly and easily producing custom-branded iPhone applications from a single code base.
 - Designed and implemented support for audio streaming, realtime chat, interaction with host(s), offers/deals, calendars, service requests, Facebook, Twitter, RSS news feeds, and runtime reconfiguration.
 - Created tooling for automated builds of multiple branded applications from a single source base, from compilation through packaging applications for the Apple App Store.
 - Design and implement runtime configuration, allowing changes to be pushed from iFan Media's servers without client code changes.

Chief Security Officer

- Ensured that iFan's business practices and products adequately protected users' personal information, and that iFan's systems adequately protected themselves from the hostile Internet.

Mirapoint Software, Inc.**2007-2010****Vice President, Field Technical Services****2008-2010**

- Led the Field Technical Services group, comprising technical pre-sales for the Americas and professional services worldwide, responsible for ensuring the success of customer deployments.
 - Improved post-sales supportability of new installations by establishing more consistent guidelines for pre-sales efforts and improving working relations with international divisions.
 - Maintained a 100% success rate for deployments worldwide.

Member of Technical Staff**2007-2008**

- Led Mirapoint's Release Engineering group, with responsibility for releases, source code control system (Perforce), and engineering build tooling, including substantial tools development efforts.

Mirapoint, Inc.**1999-2007****Member of Technical Staff**

- Mentored and led a group of junior engineers in India, forming them into a functioning engineering team.
- Contributed significant functionality and performance improvements to all the infrastructure components of Mirapoint's Messaging Operating System (MOS), especially the email transport system, including:
 - Created a new bootloader to support new hardware;
 - Designed and implemented IMAP folder sharing across multiple message stores;
 - Designed and implemented Mirapoint's SSL support, used everywhere in the system.

Cendant Internet Engineering

1996-1999

Systems Programmer and Managing Architect

- Led the Core Development group, responsible for the infrastructure supporting Cendant's e-commerce platform.
- Designed and led the implementation of the core middleware engine that mediated access from Cendant's web applications, supporting upgrades and rollbacks with zero downtime under full production load.

Teradyne, Inc.

1993-1996

Design Engineer

- Contributed significant functionality to the infrastructure components of Teradyne's automated test systems. Examples include:
 - Designed and implemented changes to allow the tester to take full advantage of multiple CPUs for DSP while retaining binary compatibility with earlier versions (patented).
 - Designed and implemented RPC mechanisms to allow the tester to be controlled by an external system.
 - Designed and implemented a multithreaded database search engine supporting regular expressions, Boolean operations, and multiple output formats.

First Albany Corporation

1988-1991

Systems Analyst

- Designed and implemented a full-screen menu-driven interface to make UNIX systems accessible to financial traders.

Digitech Communications, Inc.

1983-1987

Software Engineer

- Designed and implemented a partial PL/1 compiler to take over the function of broken hardware in the company's revenue stream.
- Designed and implemented a full-screen telephone billing data editor used to prepare telephony systems for delivery to customers.

Personal Projects

ongoing

- Developed KAsset, a digital asset identification system that can uniquely identify assets while preserving local ordering and grouping, preventing name collisions, and still permitting publishing using short, easy-to-remember names. Currently manages tens of thousands of photographs and other important data.
- Developed and open-sourced fKeys, the first MacOS X keyboard remapper to support MacOS X 10.4. Supported its user base and assisted developers incorporating its code into other tools. Although active development stopped in 2008, it continued to work with all Macintoshes and MacOS X through Snow Leopard.
- Developed and open-sourced FMI, a character-mode IMAP mailreader designed to minimize waiting time for its user, even with slow, high-latency network links and very large email folders. FMI was my primary UNIX mailreader for some five years.

Education

BS Computer & Systems Engineering, Rensselaer Polytechnic Institute, 1993