

Seth Kingsley

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Summary

- Passionate SWE with 10+ years experience shipping apps for desktop, mobile, and SaaS platforms.
- Enthusiastic about software architecture, design patterns, refactoring, and API design.
- Master of comprehending and debugging large codebases, open source technologies.
- Judiciously adopts new tools, languages, and development methodologies.
- Stays focused on high-level objectives while polishing the small details.

Experience

Founder, Filmosaur, San Francisco, CA

August 2014–April 2017 [Ruby, Rails, PostgreSQL, HTML5, CSS3, JavaScript, jQuery, Heroku]

- Created a search engine for streaming movies.
- Built a database of ~110K feature films, aggregated from EIDR, Freebase, and Wikidata.
- Continuously indexed ~330K streams from the major providers: Netflix, Hulu, Amazon, iTunes, YouTube, and Google Play.
- Implemented a search frontend using Ruby on Rails, JavaScript, and jQuery.

Independent iOS App Developer

March 2012–March 2015 [Objective-C, iOS, Ruby, PostgreSQL, Amazon EC2]

Released two iOS apps into the App Store:

- Deal Steal!: Tracks flash sales on several outdoor sports websites including REI.com and sends notifications when items matching a set of keywords go on sale.
 - Ruby/PostgreSQL backend hosted on EC2.
- TrueLoop: Practice and learn music by slowing down and looping sections of songs.
 - Imports songs from your iTunes music collection.

Contract iOS Developer, Monkey Republic Design, San Francisco, CA

June 2012–July 2014 [Objective-C, RestKit, iOS]

Implemented two iOS apps for MRD clients:

- Healthcare services search and comparison app (think “Yelp for healthcare”).
- Myers-Briggs personality types reference app for business users.

Contract iOS Developer, Slice, Palo Alto, CA

July 2011–October 2011 [Objective-C, REST, CoreData, iOS]

- Wrote the first version of Slice's iPhone app for tracking your online purchases.
- Mentored another engineer with beginning iOS development.
- Named one of the “Best Productivity Apps of 2012” by Business Insider magazine.

Software Engineer, Apple, Cupertino, CA

April 2006–June 2011 [Objective-C, C++, Xcode, CoreAudio, MIDI, Mach threads, CoreGraphics, many internal frameworks, macOS]

- Built the first few versions of MainStage [<https://www.apple.com/mainstage/>], an app for live music performance, as part of the Logic Studio music production package.
- Helped customize and tune the Logic audio engine for use on the stage.

Contract Software Engineer, Vidiator, Mountain View, CA

August 2006 [Java, C++, x86 Assembly, Win32]

- Diagnosed and patched a slow memory leak in a closed-source C++ DLL so it could be used with the JVM.

Software Engineer, iXsystems, San Jose, CA

July 2005–March 2006 [C++, Java, Swing, CORBA, PHP, MySQL, SugarCRM]

- Prototyped an appliance server framework using C++ and CORBA, with a Java/Swing UI. Designed to support a product line of infrastructure management solutions.
- Prototyped a DNS and DHCP solution based on ISC's BIND, using appliance framework.
- Wrote and maintained several internal web tools for sales and production using PHP with MySQL, integrating them as modules into the open source SugarCRM [<http://www.sugarcrm.com/>] system.
- Performed various software integration tasks to facilitate the sale of rack-mount server hardware, such as compiling custom kernels, troubleshooting drivers, and performance tuning.

Network Programmer, Simple Telecom, Reno, NV

October 2004–May 2005 [C, Python, The SIP Express Router, RTP, LDAP, MySQL, PHP]

- Wrote modules for the SIP Express Router [<http://www.iptel.org/ser/>] open-source software:
 - An active-monitoring load balancer for proxying SIP calls.
 - LDAP authentication backend.
 - Caller ID and phone number registration.
 - Concurrent call limiting.
- Added features to a VoIP broadcasting service:
 - “Press 1” during message playback and be transferred to a live human being, with RTP relaying.
 - Interactive voice recording (IVR) system in Python for recording broadcast messages.
- Fixed bugs and added minor features to the client extranet and online ordering system using PHP with MySQL.
- Designed an SSO (Single Sign-On) system, integrating PAM, NSS, Apache, Samba, Qmail, and Courier-IMAP with an LDAP backend.

Independent Software Developer

April 2004–October 2004

Projects included:

- XML transformation engine for ePilot's SDS2 system [<http://www.epilot.com>], providing an identical API to Google's AdSense. [C, DHTML, JavaScript, GNU/Linux]
- Programmable USB sound recorder for an embedded system. [C, FreeBSD, GNU/Linux]
- X Window System continuous screen capture program with network backend. [C, Xlib, Solaris]
- OSD volume control for dashboard PC. [C++, Qt, embedded GNU/Linux]

Contract Systems Administrator, Egation Communications, Fremont, CA

January 2004–April 2004 [FreeBSD, Qmail/VPopMail, Apache, PHP]

- Documented administrative procedures.
- Customized and skinned the IMP webmail application in PHP.
- Devised a scalable system for virtual hosting of web and email services using VPopMail and Apache.

June 2003–October 2003 [FreeBSD, Qmail/VPopMail, BillMax, Cisco 4000]

- Assisted the buildout of initial wireless infrastructure.
- Performed day-to-day administration and maintenance of 8 FreeBSD servers.
- Provided internet services such as mail (Qmail), web, and DNS.
- Installed and maintained an ISP billing system (BillMax).

Software Engineer, OffMyServer, San Jose, CA

August 2002–February 2003 [C, PXE, FreeBSD, GNU/Linux]

- Developed front-panel server management interface via LCD display.
- Wrote FreeBSD drivers for several server health monitoring chips.
- Deployed an unattended install system for FreeBSD and GNU/Linux server platforms using Intel PXE.
- Documented system install procedures for use by technicians.
- Researched and tested new software technologies relevant to the server/appliance market.

Associate Engineer, Wind River, Alameda, CA

May 2001–September 2001

Continued sysadmin duties after acquisition of BSDi by Wind River.

Junior Systems Administrator, Berkeley Software Design (BSDi), Concord, CA

September 2000–May 2001 [FreeBSD, Sendmail, BIND, NIS, NFS, Cisco 4000]

- Maintained hardware and software for a network of ~15 FreeBSD servers.
- Ran software services including mail, DNS, file sharing, and source control.
- Implemented automated backups.
- Provided some support for Win32 and MacOS desktops.
- Routine network/firewall maintenance on Cisco 4000 series routers.
- Contributed source patches and documentation to the open-source FreeBSD project.

IT Assistant, Delphi Information Sciences, Santa Monica, CA

Sept 1999–Sept 2000 [WinNT/98/NT/2K, Lotus Notes, MS SQL, MS Terminal Server]

- Performed software and hardware maintenance on ~15 WinNT 4.0 and several Win2K servers.
- Ran email, groupware, database, and remote login services.
- Provided help desk support for ~25 workstations.

Side Projects Port of Quake 3: Arena to the iPhone 3G.

- C, OpenGL ES, iOS
- <https://github.com/sethk/quake3-ios>
- Work now included in the ioquake3 project [<http://ioquake3.org>]

OS X driver for the Smartfish Engage keyboard.

- C++, IOKit, USB, Darwin
- Workaround for firmware that confuses the USB stack.
- <https://github.com/sethk/SmartfishEngageKeyboard>

Wrapper for Steinberg VST plug-ins to be used as Audio Units.

- C++, CoreAudio, Objective-C, Cocoa
- <https://bitbucket.org/sethk/vstau>
- Supports surround sound output.

References (Available by request)