

Seth Kingsley

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Summary

Passionate SWE with over a decade of experience shipping apps for desktop, mobile, and cloud.

- 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.

June 2017-
December 2017
(7 months)

Software Engineer, Thumbtack, San Francisco, CA

[Golang, PHP, JavaScript, PostgreSQL, BigQuery, Grafana, Mode Analytics]

Thumbtack is an online service that matches customers with local professionals. I worked on both frontend and backend components.

- Collaborated with designers and other engineers to implement frontend features for the site's professional users. This work was done in PHP and JavaScript.
- Built reports for realtime and offline reporting in Grafana and Mode Analytics.
- Ran A/B tests to validate feature variants.
- Worked on the core service for matching and pricing projects in the two-sided marketplace. This work was in Golang.
- Participated in the detailed specification and planning process for new features and infrastructure improvements.

August 2014-
April 2017
(2 years,
9 months)

Founder, Filmosaur, San Francisco, CA

[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.

March 2012-
March 2015
(3 years)

Independent iOS App Developer

[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.

June 2012– July 2014 (2 years, 1 month)	<p>Contract iOS Developer, Monkey Republic Design, San Francisco, CA [Objective-C, RestKit, iOS]</p> <p>Implemented two iOS apps for MRD clients:</p> <ul style="list-style-type: none"> • Healthcare services search and comparison app (think “Yelp for healthcare”). • Myers-Briggs personality types reference app for business users.
July 2011– October 2011 (4 months)	<p>Contract iOS Developer, Slice, Palo Alto, CA [Objective-C, REST, CoreData, iOS]</p> <ul style="list-style-type: none"> • 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.
April 2006– June 2011 (5 years, 2 months)	<p>Software Engineer, Apple, Cupertino, CA [Objective-C, C++, Xcode, CoreAudio, MIDI, Mach threads, CoreGraphics, many internal frameworks, macOS]</p> <ul style="list-style-type: none"> • 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.
August 2006 (1 month)	<p>Contract Software Engineer, Vidiator, Mountain View, CA [Java, C++, x86 Assembly, Win32]</p> <ul style="list-style-type: none"> • Diagnosed and patched a slow memory leak in a closed-source C++ DLL so it could be used within the JVM.
July 2005– March 2006 (9 months)	<p>Software Engineer, iXsystems, San Jose, CA [C++, Java, Swing, CORBA, PHP, MySQL, SugarCRM]</p> <ul style="list-style-type: none"> • 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.
October 2004– May 2005 (8 months)	<p>Network Programmer, Simple Telecom, Reno, NV [C, Python, The SIP Express Router, RTP, LDAP, MySQL, PHP]</p> <ul style="list-style-type: none"> • Wrote modules for the SIP Express Router [http://www.iptel.org/ser/] open-source software: <ul style="list-style-type: none"> - 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: • Fixed bugs and added minor features to the client extranet using PHP with MySQL. • Designed an SSO (Single Sign-On) system, integrating PAM, NSS, Apache, Samba, Qmail, and Courier-IMAP with an LDAP backend.

April 2004– October 2004 (7 months)	<p>Independent Software Developer</p> <p>Projects included:</p> <ul style="list-style-type: none"> • 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 (on-screen display) volume control for dashboard PC. [C++, Qt, embedded GNU/Linux]
January 2004– April 2004 (4 months)	<p>Contract Systems Administrator, Egation Communications, Fremont, CA</p> <p>[FreeBSD, Qmail/VPopMail, Cisco 4000 Apache, PHP, BillMax]</p> <ul style="list-style-type: none"> • Documented administrative procedures. • Customized and skinned the IMP webmail application in PHP.
June 2003– October 2003 (5 months)	<ul style="list-style-type: none"> • Devised a scalable system for virtual hosting of web and email services using VPopMail and Apache. • 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).
August 2002– February 2003 (7 months)	<p>Software Engineer, OffMyServer, San Jose, CA</p> <p>[C, PXE, FreeBSD, GNU/Linux]</p> <ul style="list-style-type: none"> • 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.
May 2001– September 2001 (5 months)	<p>Associate Engineer, Wind River, Alameda, CA</p> <p>Continued sysadmin duties after acquisition of BSDi by Wind River.</p>
September 2000– May 2001 (9 months)	<p>Junior Systems Administrator, Berkeley Software Design (BSDi), Concord, CA</p> <p>[FreeBSD, Sendmail, BIND, NIS, NFS, Cisco 4000]</p> <ul style="list-style-type: none"> • 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.
Sept 1999– Sept 2000 (1 year)	<p>IT Assistant, Delphi Information Sciences, Santa Monica, CA</p> <p>[WinNT/98/NT/2K, Lotus Notes, MS SQL, MS Terminal Server]</p> <ul style="list-style-type: none"> • 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)