

PROFESSIONAL PROFILE

Full stack engineer with years of experience developing software and designing systems for the web, mobile, and server.
Accomplished in building for scalability, eliminating performance bottlenecks, and developing for security.
Gets things done, quickly turning ideas into requirements into finished products.

TECHNICAL EXPERTISE

Client Side: Objective-C, Swift, JavaScript, HTML5, CSS3, AJAX, jQuery, Bootstrap, Ext JS

Server Side: Python 2/3, Django, Pylons, SQLAlchemy, WSGI, REST, JSON-RPC, PHP, Java, C#

Tools: PostgreSQL, MySQL, Redis, Puppet, Jenkins, Travis, Tox, Git, Mercurial, NGINX, Linux

CAREER

Bracing Effect, LLC - Owner

Jun 2013 - Present | Richmond, CA

- Designed, developed, and marketed entertainment and productivity apps for iOS. Created custom animations and UI elements with a priority on tactile interaction and immediate responsiveness.
- Rapidly adopted and integrated new Apple technologies ahead of product launches – including support for new devices, beta iOS versions, CoreData, CloudKit, WatchKit, and SpriteKit.

Vulnerability Research Labs, LLC - Senior Software Engineer

Dec 2012 - Jun 2013 | Reston, VA

- Developed service monitoring and reporting front/back-end using Django, jQuery, Bootstrap, HTML5, CSS3, and PostgreSQL.

Applied Security, Inc. - Lead Software Engineer

Jun 2006 - Aug 2012 | Reston, VA

- Led teams of up to four direct reports through complete software lifecycle – from inception to finished product, using iterative design and prototyping, with automated testing, packaging, and deployment.
- Designed and implemented a suite of secure messaging, content management, and account management products.
- Developed an HTTPS based proxy/VPN tunnel powered by a JavaScript Firefox Extension communicating through a custom designed proxy server written in Java.
- Established company interview style and made department wide hiring decisions. Led in-person and phone interviews. On-boarded new hires and mentored junior developers.

United States Coast Guard - Software Engineer

Mar 2002 - Dec 2005 | Kearneysville, WV

- Developed vessel boarding and safety inspection app for Pocket PC using C# for the interface, backed by ASP.Net web services talking to a SQL Server database.
- Created geospatial vessel tracking display using Google Earth with an embedded .Net ActiveX control. Consumed and correlated real-time vessel positions with historic vessel tracking data using a sharded SQL Server database.
- Prototyped new security models, including single sign-on via Active Directory and intranet data access through corporate firewall.
- Developed Perl scripts to parse vessel position reports, calculate course deviation, and predict tracking via dead reckoning. Eliminated significant bugs in mission critical C++ code for vessel tracking program.

OPEN SOURCE PROJECTS

Napoleon - Author Sphinx extension to support NumPy and Google style Python docstrings.

Debunked - Author Native iOS interface for the snopes.com urban legend and rumor debunking website.

Hudsucker - Author Command line tool to generate Magic: The Gathering proxy card PDF sheets.

Pockets - Author A collection of helpful Python utilities.

Sideboard - Contributor Python web app server with support for exposing web services and running background tasks.

EDUCATION

Virginia Tech - BS in Computer Engineering Minor in Computer Science, Minor in Mathematics