

# Brett Whitelaw

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## EXPERIENCE:

**Cisco Systems (in Security Applications and Services)** – San Bruno/Jose, CA September 2009 - April 2017  
*Software Engineer (levels I, II, III and IV)*

- Assumed the role of product owner on several products which involved gathering requirements, drafting architectural documents and defining user stories
- Mentored a range of engineers from new graduate hires and interns to highly experienced engineers
- Served on-call shifts for multiple critical, customer facing products as well as performed dev-ops duties including deploying applications, making configuration changes, and managing continuous integration tools
- Designed and built components of an authentication/authorization solution that involved creating a service for registering a licensed device/client, leveraging an internal CA service for signing certificates and creating an invisible proxy that understood and enforced access policies
- Contributed to the design and implementation of a RESTful web service which provides security data to small platforms
- Led the extension of that service to provide web security intelligence to IronPort Email Security Appliances in order to improve phishing catch rates; this included performance improvements, a massive expansion in cluster size as well as deployments into redundant data centers with global server load balancing (GSLB) for failover
- Led a team of off-shore contractors through all testing efforts (new, regression, performance) of the core service in a high visibility program and continued to guide the team as they took ownership of multiple products
- Wrote RESTful web services for managing device configurations as well as generating reports from device health telemetry; the applications were deployed into a Cloud Foundry based, platform as a service (PaaS), environment
- Contributed multiple plugins to a release of a real-time processing system for web telemetry that captured statistical information about customer end points and output data for easy consumption by the analysis team
- Created and maintained a system to track statistics and generate graphs for web categorization and web reputation coverage which I used to produce slides for director level engineering reviews
- Provided assistance to the customer support team during escalations
- Championed effective agile/scrum (and test-driven) practices and processes across several teams

**Solidica, Inc.** – Ann Arbor, MI May 2008 - August 2009  
*Intern/Engineer*

- Wrote C code for embedded vehicle sensor networks
- Utilized MATLAB tools to “auto code” algorithmic models
- Assembled prototype hardware/circuit-boards
- Performed both desk and field testing

**Rustbelt Recording Studios** – Royal Oak, MI Summer 2007  
*Intern*

- Recorded client musical performances with Pro Tools audio recording software and hardware as well as a range of outboard analog and digital signal processing hardware

## PERSONAL WORK/PROJECTS:

**SizeMatters (formerly InstaMax)** – iOS App (Support for iPhone and iPad), Python Tool

Designed and wrote an iOS app, using Swift 4, that performs some simple image manipulations to aid in preparing photographs to be shared on Instagram. Available in the App Store.

Wrote a Python command line tool, and web-service, to perform the same functions as the iOS app. It's available in my GitHub repo (user: bwhitela) and available on my personal website at <http://sizematters.brettwhitelaw.com>.

## TECHNICAL:

Platforms: Unix - BSD, Linux, Mac OS X, iOS

Languages: Python, Swift, Java, Scala (for testing), SQL, Shell, C/C++, HTML/CSS

Applications/Tools: Nginx, uWSGI, Xcode, Bootstrap, Memcached, Jenkins, Perforce, Subversion, Git, MySQL, CouchDB, Riak/CS, Cloud Foundry, Rally, Jira/GreenHopper, Bugzilla, Office/iWork

Development Methodologies: Scrum/Agile, Behavior/Test Driven, Waterfall

## EDUCATION:

University of Michigan, Ann Arbor

B.S.E. Computer Engineering

B.S. Performing Arts Technology – Concentration: Sound Engineering

Honors: Engineering Dean's List and Engineering Honors, School of Music Merit Scholarship (2004-2009)

May 2009