

Accomplished technical leader with over 10 years experience managing engineering teams. Best known for delivering highly reliable and scalable cloud service products and developing successful engineering teams in fast paced, high growth companies or divisions.

Major Accomplishments

- Delivered major holiday features for Walmart's mobile services including pick-up-today (20% of orders in 2 weeks), guest checkout (30% of revenue in 1 week), and an improved browse experience (conversion improved 3.7%).
 - Scaled Walmart mobile servers to 120 VMs to meet record holiday traffic (31% of holiday visits through mobile). Stress tested system to 12 million requests per hour.
 - Built Motorola's cloud services application suite in use by 20 million smartphones featuring social integration (Facebook, Twitter, and LinkedIn), single sign on services, and an end user web portal for device management.
 - Skilled at recruiting high-performance teams. Doubled Walmartlabs team from 17 to 36 engineers in one year.
 - Excellent at leading internal and external partnerships including high profile technical relationships with Facebook, Twitter, and Google.
 - Delivered products using modern SaaS platforms including Java, MySQL, NoSQL, Cassandra, Ruby on Rails, and node.js.
 - Experience building large-scale cloud services for mobile and web apps, social media integration, reporting and analytics, content management systems, and television data services.
 - Certified Scrum Master with experience training & running agile teams.
 - Graduate of University of California, Berkeley. B.S. Electrical Engineering and Computer Science 1996.
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10/2012 – present: Walmartlabs

3/2014 – present: Director of Services Quality Engineering – Responsible for services quality engineering for 12 major e-commerce services including item, inventory, order, and global store services. Manage 19 SDET and quality engineers.

10/2012 – 3/2014: Director of Mobile Engineering – Responsible for services development of Walmart's award-winning mobile e-commerce platform. Also managed end-to-end mobile QA team. Managed 17 services software engineers, 3 DevOps engineers, 1 QA manager with 15 QA engineers, and an \$8m budget (total team size 36).

- Led improvements to Java/Tomcat orchestration layer providing mobile clients (Android, iOS, and mobile web) with all e-commerce services including browse, search, cart, checkout, item lookup, login, photo, and pharmacy services.
- Delivered holiday features including pick-up-today (20% of orders in 2 weeks) & guest checkout (30% of revenue in 1 week).
- Launched new node.js services platform that proxied all Walmart mobile traffic during holiday.
- Migrated key browse and search services to new node.js services platform; browse conversion improved 3.7%.
- Launched Scan & Go and eReceipts service that lets customers scan items with their iPhone and then pay at self-checkout line.
- Expanded capacity from 40 to 120 servers and cached 40% of requests through Akamai to meet record holiday traffic (31% of visits) and stress tested to 12 million requests/hour.
- Verified over 200 releases per year for Walmart, Sam's Club, and ASDA mobile applications and services.

12/2008 – 8/2012: Motorola Mobility (acquired by Google)

11/2011 – 8/2012: Director of Services QA – Responsible for QA of services used by 20 million smartphones. Managed 10 QA engineers.

- Scaled QA organization from 12 to 30 different services tested and released on a twice-weekly cycle. Services included a highly scalable software update service and a reporting/data analytics system using Hadoop, MySQL, and Tableau for visualization.

6/2010 – 11/2011: Sr. Engineering Manager – Responsible for cloud services development used by Android smartphones. Managed 14 software engineers.

- Built a highly available end-to-end service platform with an Android client, a web browser client, and a web services layer; technologies used include J2EE, Jetty, Tomcat, Cassandra, MySQL, Spring, HTML5, XMPP, and REST-based protocols.
- Delivered 8 major products on services platform including identity management/single-sign on, social networking integration in contacts and gallery, messaging, contact synchronization, device setup, device management web portal, and MotoACTV.
- Developed and shipped Motorola's user identity and management platform used by 10 million users on phones, tablets, desktop and web-applications.
- Launched services on top selling devices including DROID X and DROID RAZR and on 200+ carriers.
- Doubled the capacity of the social aggregation service saving over \$20 million in capex without impacting user experience.
- Coordinated service application development with Beijing offshore team of 30 engineers.
- Founding member of Sunnyvale patent review committee; helped increase filings by 5x.

12/2008 – 6/2010: Engineering Manager – Responsible for MOTOBLUR cloud services development used by Android smartphones. Doubled the team in 6 months to 14 software engineers.

- Aggregated status, contacts, and photos from 10 social services including Facebook, Twitter, & LinkedIn; used by 6 million users.
- Optimized Android client to reduce memory usage by 30% and battery usage by up to 40%.
- Managed technical relationships with key internal and external partners including Facebook and Twitter.

10/2007 – 9/2008: Director of Engineering, *Digital Fountain (acquired by Qualcomm)* – Responsible for design and development of the DFSplash video content delivery network's reporting system and customer portal.

- Built a data warehouse to track and analyze end user video streaming viewing habits. Processed 500k events/day.
- Built Ruby on Rails-based applications to manage video content and Amazon's EC2 virtualized computing resources.

12/2004 – 9/2007: *FunMobility*

6/2007 – 9/2007: Director of Engineering, Tools and QA – Managed 16 software and 13 QA engineers.

- Within 1 month outsourced 60% of QA work saving \$10,000 per month; increased output 5x to 200+ devices tested per month.

12/2004 – 5/2007: Director of Platform Engineering – Managed 21 software engineers (10 onsite, 11 in Beijing).

- Delivered over 10 mobile phone product releases (BREW, J2ME, and WAP) that generated over \$14 million in revenue; technologies used include Spring, Hibernate, JSP, JSTL, AJAX, Apache, Tomcat 5.5, Windows Server, and SQL Server.
- Doubled the size of the team in less than 6 months; built an 11 engineer offshore development center (ODC) in Beijing.

7/1995 – 11/2004: *Wink Communications (acquired by OpenTV)*

11/2003 – 11/2004: Principal Software Engineer – Lead developer in server group.

- Lead architect and project manager on data warehouse project to analyze transaction and usage data from over 50,000 subscribers.
- Co-inventor of a pending patent for interactive application proxy technology (# 10/652,850).

7/2001 – 10/2003: Engineering Manager – Managed 5 member broadcast server team.

- Led 3 server releases that were deployed to 25 sites and delivered television data services to over 10 million US households (cable & satellite); technologies used: multi-threaded and network programming, C/C++, Tcl/Tk, CORBA, SNMP, and Solaris/Unix.

7/1999 – 6/2001: Senior Software Engineer – Broadcast server lead developer.

- Developed a broadcast server deployed into DIRECTV's 2 satellite uplink centers; delivered 99.99% system availability.

7/1995 – 6/1999: Software Engineer – Developer in broadcast server product team.

- Formulated patented (#7,222,155) and patent pending (# 09/333,724 and # 60/407,325) technology to interface with broadcast automation systems for synchronizing interactive and audio/video content; technology incorporated into Wink broadcast server.

University of California, Berkeley. B.S. Electrical Engineering and Computer Science 1996

SCRUM Certified, member ScrumAlliance.org

Issued and Pending Patents:

- Patent 7634787, Application # 09/333,724: Automatic Control of Broadcast and Execution of Interactive Applications to Maintain Synchronous Operation with Broadcast Programs (filed 6/15/99, issued 12/15/2009)
- Patent 7222155, Application # 09/843,614: Synchronous Updating of Dynamic Interactive Applications (filed 4/25/01, issued 5/22/2007)
- Application # 60/407,325: Advanced Technology In Local Gateways of National Interactive Television Content (filed 8/30/2002)
- Application # 10/652,850: Carousel Proxy (filed 8/29/2003)
- Application # 13365026: Modifying Application Data Synchronization Based on Application usage Frequency (filed 2/2/2012)
- Application # 61/766896: System And Method For Providing Intelligent Username In Status Updates (filed 2/20/2013)