

BRETT SCHWARZ

Principal engineer with in-depth understanding of mobile and IT network architectures. Possess significant experience with product, service, and software life cycles, and customer engagement. Effective at adapting to different environments, concepts and technologies.

 brett.schwarz@gmail.com
 +1.425.466.1731
 Bellevue, WA, USA
 [bschwarz.github.io](https://github.com/bschwarz)
 www.linkedin.com/in/brettschwarz

✂ SKILLS

Wireless

2G, 3G, GSM, CDMA, UMTS, LTE, messaging (SMSC), subscriber services (HLR, HSS)

Integration

Mobile Networks, IT Networks

Web Services

REST, OpenAPI (Swagger), OAuth 2.0, JSON Schema, HTTP/1.1, HTTP/2, SOAP, WSDL, XML, GraphQL

Network Architecture

Mobile Networks, IT Networks

Web Development

HTML5, CSS, JavaScript, jQuery, Node.js, Knockout.js, AngularJS, Bootstrap, Foundation, Gulp, Grunt, Apache, Nginx

Software Development

C, Tcl/Tk, JavaScript, Python, Java, shell, Git, GitHub, CVS, SVN, Bitbucket, Agile, DevSecOps

Computers

Linux/Unix, Windows, Mac, TCP/IP

Databases

PostgreSQL, SQLite, MySQL, Oracle, MongoDB

Testing

Functional, UAT, unit, performance

👜 EXPERIENCE

Principal Technical Architect, AT&T

June 2015 - Present

- Architected, developed, and productized an internal web application to automate and expedite API design, maintenance, and delivery.
- Established best practices for web services across AT&T as a member of the internal standards team.
- Oversaw and improved API design, security, and privacy for externally exposed APIs as a member of the external API governance team.
- Advanced the adoption of OpenAPI (Swagger) across the company by developing tools and educating internal teams.
- Consulted and mentored internal teams, specifically microservices, on API design to optimize the solution based on project goals and existing network architecture.
- Accelerated REST adoption by authoring numerous articles on REST concepts/design and collaborating on a company-wide training program.

Solution Architect, Sentaca

June 2011 - May 2015

- Ensured optimal solution by collaborating with customers and internal teams on technical and business requirements.
- Collaborated on the architecture of end to end solutions for the service exposure layer of enterprise and consumer services.
- Promoted API solutions at conferences and hack-a-thons by educating and demonstrating to customers the solution's capabilities.
- Deployed and tested API solutions with high availability, scalability, and low latency design criteria into the Amazon AWS EC2 and AT&T AIC cloud.
- Streamlined internal documentation system by implementing tooling and improved processes.

Senior Test Engineer, AT&T

October 2010 - June 2011

- Headed the performance testing efforts for the messaging platform, including authoring test cases, test case execution, and managing defects.
- Mentored team members on mobile and IT networks, by holding periodic workshops and consulting on projects.
- Developed software tools for automation and troubleshooting.

Senior Engineer, T-Mobile

May 2010 - October 2010

- Designed and engineered subscriber-based mobile network elements.
- Authored requirements, MOPs, and process documentation.
- Developed tools to streamline the implementation and troubleshooting.
- Successfully lead the engineering team on a complex subscriber and partner migration to a new platform.

Technical Sales Engineer, Alcatel-Lucent

August 2008 - September 2009

- Supported sales team with technical expertise for product presentations and consultations to the customer up to the VP level.
- Achieved highest-ranked sales engineer status by assisting the sales team

to secure a major strategic win.

EDUCATION

BS Mathematics & Electrical Engineering (Honors)
University of Toledo

Nanodegree Front End Web Developer
Udacity

PUBLICATIONS

Asterisk Open-Source PBX System
Linux Journal – February 2004
<http://www.linuxjournal.com/article/6769>

Hacking Red Hat Kickstart
Linux Journal – April 2003
<http://www.linuxjournal.com/article/6473>

LANGUAGES

English	<div><div></div></div>
Spanish	<div><div></div></div>
German	<div><div></div></div>
Mandarin	<div><div></div></div>

EXPERIENCE (cont)

- ▶ **Senior Network Systems Engineer, Alcatel-Lucent** Nov 2005 - Aug 2008
 - Headed the performance optimization customer team from an engineering and project management role.
 - Accelerated customer's understanding of the products by providing presentations and weekly performance updates to customer up to the VP level.
 - Reduced turnaround time and increased effectiveness of statistics reporting by developing an internal web-based reporting tool.
 - Collaborated with development and system engineering on performance issues to improve the product's performance.
- ▶ **Implementation Engineer, HMS Software** Jan 2005 – Nov 2005
 - Translated requirements from the customer into customized code that implemented new features into our standard software product (manufacturing ERP).
 - Performed testing, managed all bug fixes and collaborated with the customer on the integration of the solution.
 - Increased productivity by mentoring other engineers in the Tcl programming language.
 - Optimized legacy code by conforming code to new features.
- ▶ **Senior Engineer, AT&T Wireless** April 2003 – December 2004
 - Engineered messaging platforms (e.g. SMSCs) within the company's mobile network.
 - Worked with the vendor to find the optimal solution and verification of the solution.
 - Reduced response time and improved quality by developing several software tools.
- ▶ **Lead Network Engineer, PacketVideo Corporation** June 2000 – April 2002
 - Designed, tested and integrated our server (Linux) platform installation and architecture.
 - Lead first complete integration effort of our product line into the customer's network (JSP and servlets on Apache/Tomcat).
 - Significantly reduced cycle time and improved quality by developing a customized RedHat Linux Kickstart installation.
 - Improved internal communication by developing a web application for installation activities.
 - Provided pre and post-sales support, including presentations for the customers.
- ▶ **Lead Systems Engineer, Motorola** October 1996 – June 2000
 - Designed, tested and integrated products into the customer's mobile network.
 - Lead several major network changeouts for the engineering team.
 - Enhanced subscriber accessibility by developing procedure and software tools to migrate/modify subscribers efficiently and in a significantly reduced time frame.