

# 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.

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## ✂ 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, WebSockets, SOAP, WSDL, XML, GraphQL, RAML

### Network Architecture

Mobile Networks, IT Networks, TCP/IP, OSI, AWS: IAM, Lambda, EC2, S3

### Web Development

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

### Software Development

Tcl/Tk, Node.js, C, Python, Java, shell, Git, GitHub, CVS, SVN, Bitbucket, Agile, DevSecOps, Jenkins, Travis CI

### Computers

Linux/Unix, Windows, Mac, MS Office

### Datastores

PostgreSQL, SQLite, MySQL, Oracle, MongoDB, DynamoDB, Redis, Memcached

### Testing

Functional, UAT, unit, performance

## 👜 EXPERIENCE

### Principal System Engineer, 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 REST web services across all of AT&T as a member of the internal standards team.
- Oversaw and improved API design, security, and privacy for externally exposed APIs (at least two per week) as a member of the API governance.
- 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 (at least one per week).
- 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.
- Designed a new documentation system improving workflow and quality.

### 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.
- Successfully lead the engineering team on a complex subscriber and partner migration to a new platform.
- Developed tools to streamline the implementation and troubleshooting.

### 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

## CERTIFICATIONS

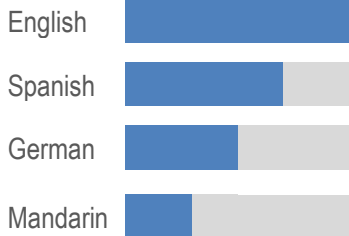
AWS Certified Solutions  
Architect - Associate  
Certificate

## 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



## 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 the customer up to the VP level, on the core network (GSM, UMTS).
  - 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.