

# Brett Schwarz

Certified Senior Cloud Architect & Software Engineer with experience leading cross-functional teams, architecting large-scale cloud applications, and collaborating with product owners and stakeholders to deliver cost-efficient end-to-end solutions. Deep expertise in API design, system architecture, and agile development.

## PROFESSIONAL EXPERIENCE

### Senior Cloud Application Architect - Amazon Web Services, Seattle

February 2021 - PRESENT

AWS Professional Services - assisting customers with requirements, planning, design, and executing solution build-outs on AWS, balancing technical design with business requirements:

- Recruited and directed a 10-person core engineering team, plus 15+ cross-functional contributors, to build a multi-tenant Smart Home (IoT) platform using microservices architecture (over 120 scalable RESTful API operations) and blue/green deployments, supporting millions of devices.
- Led application development for a Smart Devices (IoT) platform, overseeing API design, secure authentication/authorization flows, mobile push notifications, and real-time communication via WebSockets.
- Architected and led a telecom-scale frontend and identity solution, delivering a secure authentication/authorization system in compliance with strict security and business requirements, while facilitating collaboration between US and APAC engineers.
- Implemented a cloud-native workflow engine using AWS services, enabling orchestration and automation of critical business processes.
- Automated testing and defect tracking for a major mobile operator by building a cloud-based data ingestion system with RESTful APIs and AWS services, supporting future ML initiatives.
- Created a full-stack, web-based internal API management tool using AWS services, improving API lifecycle control and developer efficiency.

### Principal Engineer - AT&T, Redmond

June 2015 - February 2021

- Managed stakeholder alignment across product, design, and engineering to successfully deliver a distributed ML platform with containerized microservices, REST APIs, cloud-native data stores, and a web application.
- Migrated the entire ML platform to Microsoft Azure, improving system scalability and reducing infrastructure spend.
- Established enterprise-wide REST API best practices as part of AT&T's internal standards team. Led design reviews and drove adoption of enterprise API standards across hundreds of services.

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<https://bschwarz.github.io>

## SKILLS

### Architecture & Design

Microservices, Domain-Driven Design, Event Driven Architecture, API Lifecycle Management

### AWS Services

Lambda, DynamoDB, APIGW, EventBridge, SQS, S3, CloudFront, SNS, SES, StepFunctions, AWS IoT, WAF, Cognito, QuickSight, AVP, AgentCore, Bedrock

### Azure Services

AKS, DevOps, Cosmos DB, Key Vault, Blob Storage

### Web Development

HTML5, CSS, JavaScript, Svelte, React, jQuery, Angular, Express, Flask, FastAPI

### Software Languages

Python, JavaScript/TypeScript, Node.js, Tcl/Tk, C, Java, shell

### Software Technologies

CDK, SAM, CloudFormation, Git, GitHub, CodeBuild, CodePipeline, Kubernetes, Docker, Terraform, Packer, Jira, Asana

### Datastores

DynamoDB, MongoDB, PostgreSQL, SQLite, MySQL, Oracle, Cosmos DB, Redis

## **Solution Architect - *Sentaca*, Redmond**

June 2011 - May 2015

- Delivered high-satisfaction API solutions by collaborating with internal architecture teams and external enterprise customers, aligning design with performance and business requirements.
- Represented API products at tech conferences and hackathons, educating users through demos and technical presentations—boosting platform adoption.
- Deployed and tested highly available, scalable APIs across AT&T Cloud and AWS environments, ensuring sub-second response times and production readiness.
- Introduced and implemented a new API documentation system leveraging OpenAPI and automation tools, decreasing delivery timelines by 30% and improving internal Developer Experience.

## **Senior Engineer - *AT&T*, Redmond**

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 various projects.
- Developed software tools for automation, testing, and troubleshooting.

## **Senior Engineer - *T-Mobile*, Bellevue**

May 2010 - October 2010

- Designed, engineered, and supervised subscriber-based mobile network elements.
- Successfully led the engineering team on a complex (total replacement) subscriber migration across the entire network.
- Developed tools to streamline the implementation and troubleshooting of services.

## **Technical Sales/Senior Systems Engineer - *Alcatel-Lucent*, Bellevue**

November 2005 - September 2009

- Supported the sales team in securing a major strategic win, earning the highest-ranking sales engineer status.
- Delivered technical support to the sales team for product presentations and consultations with customers up to the VP level.
- Improved network performance by 10% while leading the performance optimization customer team.
- Developed an internal web-based reporting tool (ETL, server, and client-side) to reduce turnaround time and increase the accuracy of statistics reporting.

## **CERTIFICATIONS**

**AWS Certified Solutions Architect - Professional**

**AWS Certified Solutions Architect - Associate**

**AWS Certified Machine Learning - Associate**

**AWS Certified Security**

**AWS Certified Developer - Associate**

**AWS Certified AI Practitioner**

**AWS Certified Cloud Practitioner**

**Microsoft Certified: Azure Fundamentals**

## **PUBLICATIONS**

**Asterisk Open-Source PBX System - [Linux Journal February 2004](#)**

**Hacking Red Hat Kickstart [Linux Journal – April 2003](#)**

## **NATURAL LANGUAGES**

- **English** - Native
- **Spanish** - Intermediate
- **Japanese** -Elementary (actively studying)
- **Mandarin** - Elementary

## **EDUCATION**

**BS Mathematics & BS Electrical Engineering (Honors)** - University of Toledo