Brett Schwarz

Senior Software Engineer and Cloud Architect with experience designing, building, and scaling cloud-native applications across telecom, smart home, and SaaS environments. Proven ability to lead technical teams, own full-stack solutions, and deliver cost-efficient cloud architectures.

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EXPERIENCE

Amazon Web Services, Seattle — Senior Cloud Application Architect

February 2021 - PRESENT

AWS Professional Services - assisting customers in building out applications on AWS, including:

- Led end-to-end application development for a Smart Devices platform, overseeing API design, secure authentication/authorization flows, mobile push notifications, and real-time communication via WebSockets.
- Architected a telecom-scale frontend and identity solution, delivering a secure authentication/authorization system within a fully private network, in compliance with strict enterprise security requirements.
- Directed a 10-person core engineering team, plus 15+ cross-functional contributors, to build a multi-tenant Smart Home platform using microservices architecture (over 120 scalable RESTful API operations) and blue/green deployments.
- 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.

AT&T, Redmond— *Principal Engineer*

June 2015 - February 2021

- Co-developed a distributed machine learning platform with containerized microservices, REST APIs, cloud-native data stores, and a web application.
- Migrated the entire ML platform to Microsoft Azure (AKS, DevOps, Cosmos DB, Key Vault, Blob Storage), improving system scalability and reducing infrastructure spend.
- Designed and built a Kubernetes-hosted internal REST API design tool that reduced API build and deployment time by 50%.
- Established enterprise-wide REST API best practices as part of AT&T's
 internal standards team, improving consistency, scalability, security, and
 interoperability across hundreds of internal and external services.

SKILLS

Web Services

REST, OpenAPI (Swagger), OAuth 2.0, JSON Schema, HTTP/1.1, HTTP/2, RAML

AWS Services

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

Web Development

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

Software Languages

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

Software Technologies

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

Datastores

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

Sentaca, Redmond— Solution Architect

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.

AT&T, Redmond— Senior Test Engineer

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.

T-Mobile, Bellevue— *Senior Engineer*

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.

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

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 to 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 Security Specialty

AWS Certified Developer - Associate

AWS Certified AI Practitioner

AWS Certified Cloud Practitioner

Microsoft Certified: Azure Fundamentals

https://www.credly.com/users/brett-schwarz/badges#credly

PUBLICATIONS

Asterisk Open-Source PBX
System - <u>Linux Journal February</u>
2004

Hacking Red Hat Kickstart Linux Journal – April 2003

NATURAL LANGUAGES

- English Native
- **Spanish** Intermediate
- **Japanese** -Elementary
- Mandarin Elementary

EDUCATION

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