## **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,

- 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 and blue/green deployments.
- Delivered over 120 scalable RESTful API operations integrated with AWS (Lambda, API Gateway, S3, DynamoDB).
- 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