

SHUBHAM THAPAN

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PROFESSIONAL SUMMARY

Results-driven professional with 10+ years in automation frameworks and quality assurance leadership. Led global QA teams at Amazon and Qualcomm through complex product launches and process optimizations, driving significant improvements in testing efficiency. Expert in designing secure, scalable automation solutions while mentoring cross-functional teams to deliver impactful business outcomes.

CORE SKILLS

- **Automation & DevOps:** Python, Perl, Jenkins, Github, CI/CD Pipelines, Selenium WebDriver, Appium Inspector, UI-Automated Frameworks, API Automation Scripting
- **AWS Services:** AWS Lambda, EC2, S3, IAM, CloudWatch, Boto3
- **Data & AI:** Amazon Q, Cedric, Bedrock, Data Analytics, AI-Assisted Automation
- **Testing & Quality:** E2E QA, TestRail, Jira, OTA, WiFi/BLE (IEEE Protocols), Failure Analysis & Root Cause Debugging, Lab Infrastructure Management & Device Onboarding, Functional Testing Automation
- **Software Practices:** Agile/Scrum, Release Planning, Bug Triage, Launch Readiness, Cross-Functional Leadership, Coaching

PROFESSIONAL EXPERIENCE

Amazon – Fire TV Organization

Jun 2018 - Nov 2025

Product QA Engineer & Automation Lead

Arlington, VA

- Directed end-to-end planning, validation, and release execution for multiple Fire TV 1P NPI launches (Cube, Stick, Smart TVs), collaborating with PMTs, TPMs, and engineering teams to align rollout with customer-impact criteria.
- Partnered with cross-functional teams to define QA deliverables and ensure alignment with launch success metrics, demonstrating strong collaboration skills.
- Managed Launch Room QA Readiness by ensuring consistent AWS-backed test environment availability during global product launches, supporting process execution and stakeholder communication.
- Increased automation coverage for 1P Smart TV from 30% to 90% by integrating new products into automation strategies and refining test scripts, reflecting expertise in Functional Testing Automation and API Automation Scripting.
- Orchestrated automation consumption and utilization syncs with global QA teams (India and China), resolving blockers and aligning automation efforts with business objectives.
- Supervised the Arlington Devices Lab operations by setting up hosts and devices for automation testing, collaborating with lab engineers to suggest infrastructure improvements and onboarding new devices.
- Collaborated with senior SDEs to enhance core automation frameworks, mentoring team members and contributing to a continuous improvement culture.
- Engineered the Auto Jira MMS Plugin using AWS Lambda to streamline defect logging and TestRail integration, achieving a 70% reduction in manual tracking and enhanced release traceability.
- Developed the OTA CLI Tool for migrating DSPS services to an AWS CLI package with IAM roles, reducing operational overhead and expediting CI/CD pipelines by 50%.
- Created a self-healing Auto Test Execution Prompt that detects, executes, and debugs device automation, cutting triage time by 30% and supporting scalable automation frameworks.
- Conducted comprehensive failure analysis and root cause identification in automation and device workflows, implementing sustainable fixes to ensure long-term framework stability.
- Automated onboarding workflows via AWS Step Functions for routers and CPEs, contributing to scalable, low-cost connectivity solutions in pilot regions.
- Partnered with ISPs for IPDR logging and VNO automation, accelerating deployment readiness by 35% and enhancing collaborative problem resolution.
- Introduced end-to-end Hotspot setup automation, reducing manual regression cycles by 40% and streamlining cross-functional testing initiatives.
- Coordinated with AWS Infra teams to maintain compliance, security, and scalability goals, reflecting robust process management and stakeholder liaison skills.
- Designed and maintained the ConnQA Automation Framework for rigorous WiFi/BLE validation across multiple Fire TV devices, optimizing testing efficiency and accuracy.
- Implemented Arduino-based KPI test rigs and managed IEEE-compliant shield labs to support controlled testing environments, utilizing Data Analytics to refine testing parameters.
- Created an EC2-hosted Lab Booking Tool (Flask) to improve lab utilization efficiency by 25%, showcasing practical automation and process improvement.
- Validated Echo Studio FFS provisioning for seamless BLE/WiFi pairing across ecosystems, ensuring high standards of customer experience.
- Automated third-party router UL test flows to replicate real-world network conditions, guaranteeing a reliable end-user experience.

Qualcomm - WLAN Sanity & Automation Framework Team

Mar 2015 - Jun 2018

Senior Software Engineer

Chennai, India

Developed Python-based automation frameworks for WLAN and IoT validation (802.11 a/b/g/n/ac/ad), incorporating principles of functional testing automation to streamline testing processes.

- Created ML-driven crash prediction models using Sci-Kit Learn to prioritize high-value test cases, leveraging Data Analytics to enhance test coverage efficiency.
- Engineered a 150+ client automation farm that enabled extended stability runs with automated reporting and zero manual intervention, reinforcing expertise in API Automation Scripting.
- Validated Alexa-enabled WiFi voice assistants on Qualcomm AP platforms, optimizing throughput and reliability while collaborating closely with development and operations teams.

EDUCATION

CDAC Bangalore

2015

PG Diploma, Embedded System Design

JSSATE Noida

2013

B.Tech., Electronics & Communication Engineering

ACHIEVEMENTS & AWARDS

- Nominated by manager to co-lead automation framework modernization with core SDET team.
- Amazon Recognition for automation modernization and delivery velocity improvements.
- Trusted by leadership to provide promotion feedback and performance reviews for multiple engineers across QA and automation teams.
- Delivered multiple Fire TV launches with zero critical post-release defects; recognized for cross-team leadership and mentorship.
- Qualcomm Director's Appreciation for automating 20+ WLAN test setups in Python.