Adrian Harminto

SOFTWARE APPLICATION ENGINEER · WIRELESS TEST ENGINEER

☐ (+1) 626-242-0061 | ✉ adrian.harminto@gmail.com | 🏠 kuzame.github.io | ⌨ kuzame | 🔗 adrian-h

Profile

- Senior Wireless Engineer with 6+ years solving wireless network validation challenges through test automation and infrastructure design.
- Expert in developing scalable Python/Shell automation frameworks for high-density network regression testing (100+ clients)
- Proven ability to identify automation gaps and build custom tooling solutions that enable complex testing scenarios beyond standard frameworks.
- Early adopter of enterprise AI tooling for testing workflows, utilizing company internal LLM platforms to optimize log analysis and technical documentation.

Skills

Languages	Python, Bash/Shell, C/C++, Java
Automation & Tools	Jenkins, Meraki Dashboard API, Cisco WLC, Linux, SSH, Git, Wireshark, Ixia IxChariot, iPerf
Network Protocols	802.11be/Wi-Fi 7, OFDMA, MLO, TCP/UDP, IPv4/IPv6, VLAN, DHCP, DNS
AI/Productivity	Copilot, QGenie, AI Office Suite

Work Experience

Qualcomm
San Jose

SENIOR SOFTWARE APPLICATION ENGINEER
2024-Present

- Lead Wireless Test Engineer for Cisco/Meraki accounts, driving sanity and regression strategies for high-priority SBA (patch releases) drops.
- Engineered a custom Python/Shell automation framework to orchestrate multi-client connectivity (50+ mixed-OS devices), solving a critical manual testing bottleneck and enabling previously impossible test scenarios such as simultaneous roaming validation.
- Orchestrated automated regression cycles using Meraki's Jenkins/YAML framework, while developing a supplementary Python/Shell toolkit to handle complex client connectivity states (roaming, re-authentication, driver recovery) for manual debugging purposes that the standard automation could not support.

SOFTWARE APPLICATION ENGINEER
September 2019-2024

- Executed rigorous stability validation (Longevity) across Wi-Fi 5, 6, and 7 platforms, conducting 72+ hour endurance runs and performing root-cause analysis on system crashes (core dumps/console logs).
- Designed and deployed the physical lab topology for Cisco/Meraki testbeds, implementing strict VLAN isolation (Management vs. Traffic) and IP disciplining to optimize debug efficiency in high-interference environments.
- Managed selected high-priority Salesforce support cases, reproducing customer-reported Wi-Fi defects in internal labs and co-ordinating fixes with cross-functional development teams.

Dot11labs (WiFi performance testing labs)
Riverside

WIRELESS TEST ENGINEER
June 2018-August 2019

- Programmed Python-based automation to test router performance and control turntables for wireless signal analysis.
- Managed network performance testing using IxChariot, octoScope's stardust-UI (iPerf3), and custom CLI tools.
- Developed a DIY turntable using Raspberry Pi 3B+ with stepper motor control, reducing manual test execution time from 4 hours to fully automated runs

Education

University of California, Riverside

BACHELOR OF SCIENCE IN COMPUTER SCIENCE
2019

- Relevant Course: Data Structures & Algorithms, OS, Computer Networks, Embedded Systems, Software Engineering.