

ADARSH KUMAR SINHA

Software Engineer II [Python | Wireless | Networking | Automation | Test]

Address: Bangalore, KA

LinkedIn : <https://www.linkedin.com/in/adarsh-sinha-106ab178/>

Phone: +91 - 8147407660

E-mail: adsinha.92@gmail.com

Python Automation & Test Engineer with 5.11 years of experience in Wireless / Networking domain in Embedded domain of Semiconductor & Automotive industry



Work History

- 2016-12- Current Software Engineer II, Harman International, A Samsung Company, Bangalore
- 2016-03- 2016-11 Software Engineer, Mindlance Technology, Bangalore
- 2014-07- 2015-12 Software Engineer I, Microchip Technology, Bangalore



Technical Skills

Programming Language : Python

Android Platform Automation Framework : Android Comms Test Suite (ACTS) - Google

UI Automation Framework : Selenium , Appium Webdriver

Network Automation Libraries : Paramiko , Netmiko

Test Framework : Robot framework

Application automation : Apple CarPlay & Google Android Auto

Mobile automation : iOS, Android

Python Modules : REST API, Pyautogui, Atomacos

WLAN Protocols : IEEE 802.11 a/b/g/n/ac

WLAN Certification : IEEE 802.11n - Represented at ATL - Wipro WFA Lab , India for Toyota OEM for 802.11n

Apple Certification : Wifi Performance - ATS Utility

Network & Transport Protocol : TCP/IP , UDP , DHCP , IPv4 , IPv6

Device Experience : Infotainment Carkits , Contoller , Access-point , Router , Switches

Customer Interaction : Apple , Google , Qualcomm , Cypress , Fiat-Crysler , Daimler , BMW

Kernel : Android, Linux, MacOS

Sniffer: Wireshark, Wi-Spy, Omni-Peek, Soderia

Tools : Git, Jenkins, AppiumServer, Xcode, ADB, wi, Confluence, JIRA, Elvis, Bugzilla, iPerf

Certification

Pre - Certification on protocol 802.11n & member of Wifi Alliance

Mist WiFi Certification by Mist University - Juniper

Google Certificate - Crash course on Python

Certificate - Mobile Automation with Robot Framework & Appium using Python

Certificate - DevOps Continuous Integration and Continuous Delivery Pipelines using Jenkins, Git





Project Details

Company : Harman International , A Samsung Company

Project :

- Platform layer Automation of Android / Linux based Car-kit
- Network automation of Access-points / Routers / Switches
- Mobile automation of Android/iOS phones
- HMI UI automation over Web

Device under Test : Wifi functional test , Wifi role testing : Access-point, Station , Apple CarPlay

Project duration : 2018- 2020

Projects automated : Fiat Chrysler , Daimler , BMW , GWM , Ford , Toyota , Maruti

Language : Python

Android platform automation of Wi-Fi stack using Android Comms Test Suite - ACTS FW of Google

Network automation of Routers and Switches using Paramiko & Netmiko

Android/iOS Mobile Automation using Python & Appium

Web UI Automation of Car-kit , Access-point, Network switches using Python & Selenium

REST API testing using Robot framework with HTTP Methods for Web interface of Access-points

MacOS Desktop Application Automation using Python modules: Pywinauto , Atomacos

DevOps Continuous Integration and Continuous Delivery Pipelines using Jenkins, Git

Project : Wifi Pre-certification - 802.11n of Carkit

Projects automated : Fiat Chrysler , BJEV

Project duration : 2017

WLAN Pre-certification :802.11n, Involved in bring-up of WFA 802.11n test-bed in RF chamber

Understanding of WFA Sigma Python framework along with execution

Represented at ATL - Wipro WFA Lab , India for Toyota OEM Carkit for Wifi - 802.11n WPA2

Understanding of WLAN MAC layer Protocols : 802.11 a/b/g/n/ac , WPA Supplicant

WLAN Protocol testing on Products based on wifi controller like : Cypress , Marvel , Broadcom , Microchip

WLAN Pre-certification - 802.11n - Involved in bring-up of WFA802.11n test-bed in shield room - WFA

Represented at ATL- Wipro WFA Lab , India for Toyota OEM Carkit for Wifi - 802.11n WPA2 certification

Project : Wifi and BT_Coex IOP and Performance testing

Projects automated : Fiat Chrysler , BJEV , GWM

Project duration : 2016 - 2017

Wireless Performance Testing using iPerf with diff transport layer protocols : TCP/IP & UDP

Wifi wpa_supplicant testing using wpa_cli utility

CPU wifi performance , Network layer IP testing - DHCP

Inter-operability Bluetooth Coex testing of Automotive OEM Units

Involved in Joint IOP session of Harman Carkit IOP with Qualcomm chipset mobiles



Project Details

Company : Mindlance Technology

Project : Wifi Home AP automation on Broadcom chipsets

Project duration : 2016

Project: WLAN Home AP association with Broadcom chipset and enhancement of Association to Home AP when the home AP is available in range otherwise the radio goes off to sleep

Understanding background scanning and enabling background scanning for Home AP

Company : Microchip technology

Project : Wifi Pre-certification - 802.11n - RF Chamber

Projects automated : Microchip chipsets : CY920 , Multizone

Project duration : 2014-2015

WLAN Pre-certification - 802.11n - RF chamber

White box testing for Wifi protocol , fixing issues and integrating patches and generating builds

Testing Wifi features like Active and Passive Scan feature modifications of AP/STA mode , auto-connect feature , RSSI level and debugged reported by client Forming setup of modules for audio streaming



Education

Bachelor of Engineering. : Electronics & Communication- [72%]

Bangalore Institute Of Technology - (BIT) - VTU - Bangalore, KA

(63rd Rank among all the Private & Government colleges of India)



Interests

Played Badminton at District Tournament & Active member of CRYNGO