Raanasukumar Muthyam

Senior Engineer, Solutions Automation and Test
rsk.muthyam@gmail.com
+91 949 325 9772

Summary

- Results-driven Engineer with 7+ years of experience in **automation, AI-driven solutions, and networking/telecom systems**. Skilled in **Python, TCL, and Robot Framework** for automation of complex network environments and test frameworks. Strong background in **DevOps practices** using Jenkins, Git, and Bitbucket with experience in **cloud platforms (AWS, GCP)** and **hypervisors (VMware, Proxmox)**.
- Proficient in **framework design, intelligent automation**, and integration of **machine learning and LLM-based workflows** to optimize testing and operational efficiency. Experienced in **network protocols (VLAN, DHCP, QoS, Netconf, GPON, etc.)**, **infrastructure management**, and **security vulnerability assessment**.

Skills

Scripting languages	-	Python, Robot Framework, Groovy, TCL.
Operating systems	-	Linux (Debian, RedHat, Kali), Windows.
Cloud	-	Amazon Web Services, Google Cloud Platform
DevOps & Source Control Tools	-	Git, Jenkins, JFrog & Nexus Artifactory, Bitbucket, Bamboo, Docker
Hypervisors	-	Proxmox, VMWare ESXI, VirtualBox
Protocols	-	VLAN, ARP, DHCP, GPON, ICMP, IGMP, OAM, Lawful Intercept. Netconf, Restconf, Qos, IPFIX.
Security Tools	-	Nessus, Nmap
Products worked on	-	Huawei, Nokia, Adtran, Calix devices.
Test and Collaboration Tools	-	Spirent Testcenter, Wireshark, Jira, Jira API, Ixia, Atlassian tools

Experience

Software Engineer at ADTRAN Networks   2nd January 2019 – Nov 2021
G. Fast System Test and Infrastructure Management

- Good Knowledge and Responsible for bringing up functional and non-functional testbeds.
- Experienced in Manual testing of **DPU**, **ONT** and **CPE** as DUT. Feature testing and analyzing field issues reported by Customers. Good Understanding of **GPON**, **DHCP**
- Automation of Manual Scenarios with **Robot Framework** and **Python** and **Selenium Webdriver**. Strong understanding on Robot Framework execution architecture.
- Experience in creating **Declarative Jenkins Pipelines** with **Python Virtual environments, Groovy, and Shell Scripting**. Responsible for creating pipelines according to Team Requirements.
- Good scripting knowledge in Python, Supported Jenkins utilities and Robot Framework Testcases by writing **Python API's**
- Good understanding on **Virtualization**, Responsible for maintaining Jenkins Infrastructure and Team Lab Requirements with Virtual Machines. Good Experience in handling **Proxmox, VMWare ESXI.**
- Experienced in analyzing Security issues by performing **Nessus** and **Nmap** scans. Proper understanding of port, OS, web vulnerabilities. Responsible to perform Security tests on Web applications, and ONU, CPE devices

Network Engineer and Test Professional at OPENREACH (British Telecom Plc)   Nov 21 – Mar 23
Network Integration/Conformance Test
- Understanding the logical real time design in the field and implementing the tests. Working with multi-vendor devices for interoperable tests.
- Working on Real time issues found in the live network from the field and investigating the issues.
- Working with Development and R&D teams from different product vendors for the end-end solution.
- Automating test cases in TCL, Python and Robot framework, Working with a variety of DevOps tools like GitLab, Nexus Repository Package Manager, SonarQube IQ, and Cloud Bees Jenkins.

Engineer, Solutions Automation at CALIX   Mar 23 – Now
Solutions Automation and Tool Development
- Automation of tools and utilities using python.
- Working with Calix Layer 2 and Layer 3 products including GPON based OLT, ONT.
- Writing test plans for the solution test, Automation of tests in Robot framework and Python, Notable Automation features include – Qos, OAM, IPFIX, Lawful Intercept, TFTP, Customer based test scenarios, Field Issues.
- Working on Automation Integration with Bamboo, Bitbucket, Jenkins, Sonatype nexus artifactory.
- Worked on Automating Cloud based application for Calix, Calix Cloud Operations Platform using Rest API.
- Creating custom AI agents using LLMs and training models for internal script auto generation to support automation of automation.
- Leading internal tool development project called toolbox and contributing independent tools and utilities for the solution test department in Calix.

Educational Background
- Bachelor of Technology in Information Technology from VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad in the year 2019 with 74%.
- Diploma in Metallurgical Engineering in Government Polytechnic College, Kothagudem in the year 2015 with 77%.
- SSC from BSE, Telangana in 2012 with 87%.

Personal Achievements and Certifications
- Awarded for Developing an Educational blog in college. Currently the blog is used by Government Polytechnic, JNTU Hyderabad and Metallurgical students from Andhra Pradesh. (ACTIVE)
- Cisco Certified Entry Network Technician (CCENT).
- Certified Ethical Hacker by Linux Academy (Basic).
- Linux Professional Institute Certificate II by Linux Academy.

Notable Work
- Automating API calls for JIRA Cloud.
- Slack Workflows, Integrations with Bitbucket and Bamboo.
- Parameterized dynamic netconf rpc functions.
- Parallel staging Jenkins Jobs.

- Dockerizing automation environment for portable executions and testcase development.
- Dynamic reports for Qos Automation Testcases.
- Conducted Bootcamp for Robot framework training across teams.

- Thoughtful robot framework listeners implementation for test case reports and live logging test case executions.
- Design and development of python library packaging and indexing in artifactory.
- Integration of Microsoft Teams messaging into Jenkins Pipeline for automated custom messaging.
- Received accolades for developing Internal bookmarking websites and awarded spot awards for extensive work on OAM, Lawful Intercept, IPFIX Automation.
- Created AI Agent for Weekly Status Reporting; A hybrid model - Jira and Ollama. Received multiple internal hackathon awards.
- Contributed to AI driven ideas such as RegressionBot - First level of failure analysis. This was recognised and awarded in internal hackathons.