

RENU FALODIYA

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Exploring a full-time software engineering opportunity with a technology company in the bay area. My core competencies are software automation and network engineering with knowledge of layer 4, 3, 2 and physical layer with devices like routers, switches, HFC nodes and cable modems.

SKILLS

- Programming - Python. Also have working knowledge of JavaScript, AngularJS, VBScript, HTML5, CSS3.
- Networking - DOCSIS, OFDM, OFDMA, QAM, AnnexA, AnnexB, ARP, PTP, TFTP, VRF, IP Tables, ACL, IS-IS, RIP, TCP/UDP, QoS.
- Video - Video core, Video Engine, 8VSB, ATSC.
- Databases - SQL/MySQL, MongoDB.
- Methodologies - SDLC and Agile/Scrum.
- Validation - Pytest, Selenium, WebDriver, HP QTP, UX Testing.
- Toolset - Bitbucket, Git, JIRA, Wiki, TestRail, Crucible, MS Office.
- OS/Platforms - Cable Modems, Routers and Switches. Cisco IOS, Linux, MacOS X and Windows.

PROFESSIONAL EXPERIENCE

Nokia (America) Corp, Sunnyvale - *Software Automation Engineer*

June 2018 - Present

- Working as an automation engineer for Fixed Networks on D3/DOCSIS protocol for HFC/PON nodes.
- As a module lead, designing new topologies, providing estimates, driving code reviews, coordinating with teams in China and Raleigh and helping in expanding the team by hiring network automation engineers.
- Developing validation modules for Video, 8VSB, VideoCore, Dektec, IP Tables, ACLs, TFTP and TFTP Proxy protocols on VCMTS, HFC nodes (RMD and RPD). Also developing python libraries to configure and debug switches, routers, cable modems and DHCP servers.
- Owning end to end validation responsibilities of three network topologies including configurations, physical setup, validations and test cases automation.
- Debugging and analysis of network packets and traffic to troubleshoot issues.
- **Tech Stack**
 - Python, PyTest, Jenkins and Robot framework
 - YAML and XML/JSON Encoding
 - Spirent, Lanforge, Linux - Redhat 7.5 and CentOS
 - Netgear, Nokia 7210, Juniper Omni switches and Cisco Nexus, Nokia SROS routers, Dektec, Tacacs, Video Core, Video Engine, GAC

Cisco Inc., San Jose - *Software Engineer*

July 2017 - June 2018

- Responsible for developing and validating integrations between Cisco IOS XR Routers and Google OpenConfig.
- Developed libraries for TCP/IP core protocol stack in Python using YANG data model
- Designed, developed and executed test plans to validate functionality of OpenConfig features on Cisco IOS XR Routers
- Designed, developed and executed test plans to validate telemetry M data for openConfig Network Instance
- Identified critical bugs during manual and automation testing

- Built a strong foundation in software development, debugging, troubleshooting, quality assurance, computer networks and Linux operating system environment
- **Tech Stack**
 - Python, PyTest, IXIA/Spirent, REST API
 - NETCONF, YANG, XML/JSON Encoding, Cisco Test automation, VRF, LR, gRPC, Google protocol buffer, Telemetry
 - Linux, Virtual Machines Routers and Cisco IOS XR Router

Independent Consultant

2016 - 2017

- **HighFidelity** - AR/VR game testing on Mac OSX, Environment creation for running various tests. Reported bugs related to functionality and performance of the game.
- **WeLocalize** - Apple iTunes web app internalization, localization and linguistic translation related validations
- **Ubertesters** - Software testing of Spartoo and Highlights mobile apps on Android and iPhone
- **TryMyUI.com** - User experience testing of websites for many clients like Netflix, Hulu, Photo Keeper, Open Listings etc.

ACADEMICS

Bachelor of Technology (B. Tech) - Electrical Engineering

National Institute of Technology (NIT) - Kurukshetra, India

Aug 1997- June 2001

First Division Holder - Electrical Engineering

CERTIFICATIONS & TRAININGS

- Nokia Certification - Machine Learning - Why All the Fuss? | SMAACOP-W1904, June 2020
- Nokia Certification - Your Creativity Skills Self-Assessment | TBU00298W, November 2019
- Nokia Certification - Data Science Overview, September 2019
- Nokia Certification - Nokia Gainspeed Solution - Technologies and Products | FN01090-K, September 2019
- Nokia Certification - AI and ML Solutions with Python: Implementing Robotic Process Automation, September 2019
- Nokia Certification - Introduction to Artificial Intelligence, September 2019
- Nokia Certification - SDAN Solution in Fixed Networks | TAC60071-W-0003, September 2019
- Nokia Certification - Python: Iteration and Exceptions, August 2019
- Nokia Certification - Course on 5G tech, August 2019 (Nokia internal)
- Nokia Certification - Gainspeed Introduction to Monitoring and Alarms | FN03997-K-1820, August 2018
- Cisco Certification - Programming for Network Engineers, Dec 2017
- Lynda Certification - Learning the Python 3 Standard Library, May 2017
- Lynda Certification - UX Foundations: Making the Case for Usability Testing, May 2017
- Lynda Certification - Lightroom 6 Essential Training, Mar 2017
- Lynda Certification - Working with Raw-Format Photos in Lightroom 5 and Photoshop CC (2013), Mar 2017
- LinkedIn Course - Foundations of Programming: Software Quality Assurance, Oct 2016
- LinkedIn Course - Introduction to Photography: Lightroom and Photoshop, Oct 2016