

Software Development Engineer

- Test Automation

ONF and its partners have been committed to enabling network operators (telco, cloud, and enterprise) embrace open networking by way of Software-Defined Networking (SDN) and white box hardware. An important part of achieving this goal has been to create open-source software stacks that the community can adopt and build on in a variety of networking areas, including datacenter fabrics, broadband wired access, optical core transport, and 4G/5G mobile core and RAN.

About the SD-RAN Project (<https://opennetworking.org/sd-ran/>)

The SD-RAN project is developing an [O-RAN](#) compliant near-real-time Ran Intelligent Controller (nRT-RIC) and a set of exemplar xApps for controlling the mobile RAN. This SD-RAN RIC is cloud-native and builds on several of ONF's well established platforms including the ONOS® SDN Controller. The goal is to foster the creation of true multi-vendor RAN solutions and help invigorate innovation across the RAN ecosystem, an area historically dominated by vendor-proprietary base-stations. Learn more from the [Press Release](#)

About the role

ONF is looking for a software development engineer in Test Automation to join the SD-RAN team. As ONF's nRT-RIC gears up towards field trials with our operator partners, the role of a software engineer in Test framework development and Automation is critical for the delivery of a production ready solution. In this role, the engineer will report to ONF's Director of QA and work closely with the ONF SD-RAN developers to build the test infrastructure needed for the project. The role also requires interaction with 3rd party xApps and vendor hardware certification as we integrate their products into the SD-RAN solution.

Candidate Requirements:

- BS or higher in CS or similar technical field, with 5+ years of experience in Test Framework development and Automation
- Expertise in automation framework tools (ex: RobotFramework, Selenium or similar)
- Expertise with Python programming
- Expertise in developing tools and automation infrastructure to improve quality and efficiency of testing
- Expertise in maintaining test infrastructure and automation framework through continuous integration

- Expertise in automation of several types of test cases (ex: functional, end-end, soak)
- Expertise in building and managing CI/CD jobs (Jenkins, TravisCI or similar)
- Proven experience in debugging, finding, isolating, and tracking bugs through resolution
- Experience in developing test strategies and implementing testing process in Agile
- Soft skills:
 - Communicate clearly, both when writing documentation and giving presentations to the rest of the organization.
 - Must be able and willing to collaborate with teams in other time-zones; Good relationship and co-working skills

Background desired:

- Experience working in the cellular industry, testing cellular technologies and good understanding of LTE architecture (ex: RAN, eNodeB, MME, S/P-GW) network elements and interfaces
- Experience working on L2, L3 protocols, TCP/IP, IPv4/v6
- Good understanding of 5G is a plus
- Exposure to networking tools such as Wireshark, Network Simulators etc
- Experience with Kubernetes/Dockers, Git, Gerrit

About the Open Networking Foundation (<http://opennetworking.org>)

The Open Networking Foundation is headquartered in Menlo Park, CA. We are a non-profit operator led consortium driving transformation of network infrastructure and operator/supply chain business models. We are an open, collaborative, community of communities. The ONF serves as the umbrella for a number of projects building solutions by leveraging network disaggregation, white box economics, open source software and software defined standards to revolutionize the carrier industry.

We are building Open Source Tools and Platforms to *accelerate* the adoption of Software Defined Networking (SDN), Cloud infrastructures, Virtualization, and Network Functions Virtualization (NFV). We are an Open Source *development* organization with strong research, product and innovation background.

We are looking for people who are passionate about learning and who are open minded about the way cloud infrastructure and networks are built. We want people with a strong desire to implement their ideas and see those implementations used in real networks. Have you built and delivered products for commercial companies? Have you done applied research in cloud infrastructures and networks? Have you contributed to Open Source projects?

What is life like on a daily basis at ONF? We work closely with operators, partner engineers, and executives leading change in the networking industry. We develop with agile methods. We challenge each other, we brainstorm, we write code, we create new

implementations that have *real impact*. We collaborate closely with both commercial and academic organizations. We have fun and we make a difference.