SEBA Software Developer (Berlin)

About the SEBA Project (https://www.opennetworking.org/seba/)

The SEBA project builds on ONF's CORD project, the leading open source project combining Software Defined Networking (SDN), Network Functions Virtualization (NFV) and Cloud technologies. SEBA's mission is to transform broadband network edge infrastructure (fiber to the home/business) through hardware disaggregation, virtualization, micro-services, open source tools and platforms. SEBA provides a new cloud native edge architecture that brings scale, performance, and high-availability to address the challenge brought by growing Internet traffic demand at the edge of the network. SEBA is led by ONF together with operators AT&T, Deutsche Telekom (DT) and Turk Telekom (TT) and is in field trials in Europe, with production deployments planned for 2020.

About the role

ONF is building a small team in Berlin, Germany to work very closely with DT and TT in their SEBA production deployments. A key component of SEBA is the abstraction layer used to hide the differences and complexities of different hardware devices used in the network - we call this component the virtual OLT hardware abstraction, or VOLTHA. VOLTHA is comprised of a set of docker based microservices deployed through HELM charts on a Kubernetes cluster. The role is in the VOLTHA development team, contributing to the open source codebase of the project. It is a great opportunity to immerse yourself in the world of Broadband Access systems (FTTH/FTTB) while learning about and building modern cloud infrastructure through cutting edge technologies.

- It is a hands-on role, spending most time developing software
- The candidate will become an expert in the VOLTHA code base (and SEBA/CORD in general)
- Activities in the role span development, deployment, functional and unit testing - it is a mid level role with growth opportunity within the team.
- The candidate will work in an open source community, meeting with developers and leadership of major service providers in Europe.

Background desired:
- Technical skills
    - Base experience with cloud native technologies - Kubernetes, Helm charts and containerized applications
    - Python and Golang are primary languages, Java and C/C++ are helpful
    - Experience with grpc, kafka, etcd is a plus

- o Agile development
- o Experience with Unix-based operating systems (multi-distro, non-Linux, non-Unix experience is a plus)
- o Experience with embedded software and Broadcom SDKs is a plus
- o Should be able to reason about scale and performance
- o Should be willing to take a `full-stack' approach
- o Strong software design methodology and proven development skills (has taken software from concept into production)
- o Experience with cloud infrastructure and scalable services (microservice architecture) is beneficial
- o Prior Experience with ONF software and platforms is desirable
- o Familiarity with version control, bug tracking, and CI/CD systems
- o Prior startup experience is helpful
- Soft skills
  - o Proven ability to learn new technical concepts and systems
  - o Can argue the pros/cons of different solutions and implementations, justifying the choices made.
  - o Good communication skills, adaptable to multiple communication methods (in-person, video conference, chat, email). Must be able and willing to collaborate with teams in other time-zones - US, India, Taiwan, Turkey etc
  - o Able and inclined to write technical documentation
  - o Good relationship and co-working skills
  - o Detail oriented

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.