

Assistant (Student)

# Development, Analysis and Maintenance of an SDN / TSN Prototype

The student will analyze the performance of an existing SDN testbed and, if required, adapt the controller software (OpenDaylight) himself / herself. Furthermore, he/she will setup and extend the testbed with readily-available TSN forwarding devices. Finally, the student will evaluate the suitability of the TSN devices for deployment in a number of pre-selected industrial applications. Subsequently, he/she will take part in formulation and deployment of configurations of the physical hardware (i.e., time schedules, forwarding tables and features such as pre-emption and frame replication).

The position is in industry with Siemens AG. The student will be supervised by an university contact as first supervisor, with industrial contact as second supervisor. Extensions into obligatory (research) internships / thesis are not excluded.

## Prerequisites

- Linux Networking Knowledge
- Ideally first-hand experiences with SDN as technology or development experience with common SDN platforms
- Some programming experience is required (Java, Python, NETCONF/YANG)
- Proficient English and/or German communication skills
- Ability to work and pursue solutions under limited supervision
- Motivation to work with real hardware deployments

## Contact

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## Advisors

Ermin Sakic  
Ermin Sakic (Siemens AG)