

# **INTERNSHIP**

#### COMPARING OPEN-SOURCE CORE IMPLEMENTATIONS

Citymesh is a telecom company that builds private wireless networks for companies & governments. To deploy these networks we work together with costly vendor-specific implementations. However, some open source implementations promise the same functionality as these vendor-specific implementations.

This is why we want to explore different open source 5G core implementations and why we want to investigate where these implementations could be of use for Citymesh.

# **About Citymesh**

Citymesh delivers state-of-the-art connectivity. As operator and integrator, we have been planning, installing and maintaining high-end networks for fifteen years.

Next to our networks, we offer complimentary innovative solutions to reach the next level in every market we serve (autonomous flying drones, 5G connectivity at sea, smart cities,..).

More about our products and services can be found here: https://citymesh.com/en/solutions

### The goal

At the end of the internship we hope to have a good (high level) overview of different open-source implementations and hope that the knowledge gathered by the students will enable us to choose which system we will use in future projects. Thus this internship is of very high importance to us.

### Technologies that we want to investigate

- Magma (https://magmacore.org/)
- Open5GS (<a href="https://open5gs.org/">https://open5gs.org/</a>)
- Srs RAN (<u>https://www.srsran.com/</u>)
- Free 5gc (https://www.free5gc.org/)

## The internship

- Providing an overview of the features of each ecosystem
- Identify use cases for each ecosystem
- Identify potential hardware suppliers
- Building the different open-source 5G networks and evaluating them according to a test plan



### Our approach

We try to coach every student and supply them with all the extra resources / training needed. Our interns always have a dedicated mentor that is always ready to help! You will work in a high-tech environment with a young and dynamic team.

# Student profile

- Any student that is eager to learn about 5G is welcome, however having knowledge of 4G/5G/Lora/Sigfox/... technologies is a plus!
- Programming knowledge is required
- High interest in wireless communication

#### Interested?

Contact Jens Buysse (jens.buysse@citymesh.com) with your CV.

#### Not interested?

We have a lot of other internship opportunities available. Please contact Jens Buysse (jens.buysse@citymesh.com) for more information.