



## Munich Research Center

**Huawei** is a leading global information and communications technology (ICT) solutions provider. Driven by a commitment to operations, ongoing innovation, and open collaboration, we have established a competitive ICT portfolio of end-to-end solutions in Telecom and enterprise networks, Devices and Cloud technology and services. Our ICT solutions, products and services are used in more than 170 countries and regions, serving over one-third of the world's population. With 180,000 employees, Huawei is committed to develop the future information society and build a Better Connected World.

**Huawei's Munich Research Center** is responsible for advanced technology research, architectural development, design and strategic engineering of our products. As a member of our newly established HiSilicon Wireless Terminal Chipset Technology Lab at our Munich Research Center (MRC) you will contribute to Huawei's fascinating broad wireless product portfolio.

Now we are looking for a

### **PhD Student in System Analysis of non-terrestrial network architectures for 5G/6G (m/f/d)**

To extend coverage and capacity of the 5G cellular network, satellite communications with the user equipment (UE) supplements the terrestrial 5G network. Low-earth-orbit (LEO) satellite constellations are particularly attractive due to limited transmit power requirements for the user equipment. However, usage of LEO satellite constellations create new challenges for the network design due to the short visibility of individual satellites and their large Doppler and propagation delay variations. You will investigate and analyze the service link for LEO satellite network architectures including their impact on the user equipment in terms of power consumption, signaling overhead and required parameter estimation.

**The student will be based at Huawei's Munich Research Center and enrolled at the doctoral program at Univ. Pompeu Fabra (UPF) in Barcelona, within the Wireless & Secure Communications Research Group: <https://www.upf.edu/web/wisecom>**

### **Responsibilities**

- System analysis of non-terrestrial network architectures for 5G/6G with additional focus on the impact on the UE design
- Development of novel concepts and techniques to optimize the service link for LEO satellite networks
- Dissemination of results through 3GPP standards contributions and scientific publications

### **Requirements**

- Successfully completed Master's degree in Communications Engineering, Electrical Engineering, Computer Science/Engineering or Mathematics
- Solid knowledge of wireless communications, statistical signal processing and linear algebra
- Advanced programming skills in MATLAB/Octave
- Highly committed and self-motivated, excellent team-worker, with strong problem-solving skills
- Excellent written and spoken English skills
- By applying to this position, you agree with our RECRUITMENT PRIVACY STATEMENT. You can read in full our recruitment privacy statement via the link below



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## Beneficial additional qualifications:

- Knowledge about LTE and/or NR standards
- German language proficiency
- Familiarity with programming languages Python, C++
- Background on satellite communications

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<https://career.huawei.com/reccampportal/portal5/grcprivacy.html>

## What you can expect

- Our culture is characterized by innovative power and team spirit as well as the intensive exchange of knowledge and experience within our global network.
- We offer you a competitive compensation package and a broad range of training opportunities. Many online and face-to-face training programs.
- Self-responsible work in a competent, motivated and constantly growing team.
- Periodic visits to Barcelona for face-to-face interaction with the academic supervisor(s) at UPF

If you are enthusiastic in working with a multicultural team of highly skilled Engineers and Researchers at Huawei Munich and with the academic team at UPF, feel free to contact us. **Apply now!**

Please submit your application to <https://apply.workable.com/huawei-16/j/F654F04B5D/apply/> and send your application material by email to Professor Angel Lozano ([angel.lozano@upf.edu](mailto:angel.lozano@upf.edu))