Start your mission with DLR

The German Aerospace Center DLR has a dual mandate as the national research center for aeronautics and space, and as the space agency of the German federal government. Approximately 10,000 people work for DLR on a uniquely diverse range of topics spanning the fields of aeronautics, space, energy, transport and security research. If the idea of joining a top-class team of researchers working in a supportive, inspirational environment appeals to you, then why not launch your mission with us?

At the Institute of Communications and Navigation in Oberpfaffenhofen, near Munich, we offer:

Internship
Conception and Implementation of the Software Architecture for an Urban Mobility Demonstrator

Your mission:
Within the last years we are living a radical transformation of the urban mobility. And this transformation is fostered, among others, by the climate change and the decreasing quality of life in big cities. One plausible solution is to increase the attractiveness of the public means of transport, such as bus, subway or train, as reliable alternative to the private owned car. In addition, many cities are enriching their mobility network with micro-buses on demand and shared bicycles and e-scooters. While a nourished and heterogenic urban mobility network is vital to decrease the cars on the roads and the gas emissions, the need of tools that ease the urban multimodal mobility and enable location-based services and data analysis for traffic planning is gaining importance.

The targeted urban mobility demonstrator uploads the smartphone sensor data to the server where it is processed and the processed solution is visualized in the smartphone. The up- and download occurs in real-time. The algorithms hosted in the server compute the passenger position and the mean of transport used in real-time. In this internship, you will develop a platform that communicates the passengers’ smartphones with the central server. You will develop a smartphone-app able to collect, pre-process, send, receive and visualize data and research algorithms to reduce to a minimum the exchange of up- and downlink data.

Your qualifications:
- Knowledge of C++ and Python
- Good programming skills in Android API
- Excellent English knowledge written and spoken

Your benefits:
You will work with a young and international team. We are flexible in the starting date and the weekly working hours for an optimal combination of this internship with your studies. After the successful completion of this internship, you can apply for a job offer as software developer with us. DLR is in the top 10 most popular employers in Germany.

If you would like to apply for this internship or you think you can support us in any other way, please contact Estefania Munoz under estefania.munoz@dlr.de. Visit our Instagram account urban_mobility.dlr