



ARE YOU ENTHUSIASTIC ABOUT CUTTING-EDGE TECHNOLOGIES? DO YOU ENJOY APPLYING YOUR EXPERTISE PRACTICALLY, WORKING INDEPENDENTLY AND GOAL-ORIENTED? WE ARE LOOKING FOR COMMITTED STUDENTS OF ENGINEERING SCIENCES TO WORK ON CURRENT RESEARCH FOCUSES AS A

# STUDENT ASSISTANT IN THE FIELD OF **ALGORITHM DEVELOPMENT FOR AUTONOMOUS SYSTEMS** IN INGOLSTADT

The Fraunhofer Application Center »Connected Mobility and Infrastructure« in Ingolstadt develops concepts and technologies for a safer, more productive and resource-efficient mobility of the future. The researchers focus on topics of automated and cooperative driving as well as autonomous flying. The young and dynamic team combines diverse competences in the fields of sensor technologies, communication technologies as well as artificial intelligence. The center leverages synergies with local industries, the Technische Hochschule as well as the city of Ingolstadt.

Autonomous systems, such as drones, are playing an increasingly important role in the fields of transportation, logistics, and surveillance. Through the development of efficient and reliable algorithms, it is possible to both guarantee and improve the performance and safety of autonomous systems. In this context, the areas of coordination, communication, control, as well as sensor data processing, are of crucial significance.

## What you will do

During the development stage, both simulations and real test platforms are needed to demonstrate the functionality of the algorithms. In your role as a student assistant, you will take on independent tasks and provide support in the area of algorithm development. This might involve tasks such as assisting in the implementation and demonstration of developmental approaches on test drones or working on the visualization and expansion of simulations.

### What you bring to the table

- student of Engineering Sciences with a focus on automation and control technologies or similar
- excellent academic performance
- experience in programming, preferably Python, C and ROS
- structured, self-dependent and result-oriented way of working
- ambition, creativity and commitment in the daily work routine
- high motivation and ability to work in a team

## What you can expect

- challenging tasks in cutting-edge and application-relevant subject areas
- interdisciplinary research on promising technologies
- professional supervision
- a modern research infrastructure
- flexible working hours
- a young, dynamic team in an open and friendly working environment
- access to potential topics for internships and theses

Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared entirely to people's needs: health, security, communication, energy and the environment. We are creative. We shape technology. We design products. We improve methods and techniques. We open up new vistas.

At the institute's sites in Dresden, Ingolstadt and Berlin, Fraunhofer IVI's researchers are developing technologies and concepts for mobility, energy, as well as safety and security – from forward-looking preliminary research to practical applications in everyday use. The institute collaborates closely with TU Dresden, TU Bergakademie Freiberg and the Technische Hochschule Ingolstadt.

Interested in working with us? Please register at the career portal of the Fraunhofer-Gesellschaft and send us your meaningful application. We look forward to meeting you!

### **Career Portal**

# If you have any questions, please contact:

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