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IVI

IS IT POSSIBLE TO STUDY AND BUILD A CAREER AT THE SAME TIME?

YES.

We'll show you how at Fraunhofer.

MOBILITY IS YOUR PASSION AND WORKING INDEPENDENTLY IS YOUR STRENGTH? DO YOU WANT TO USE AND EXPAND YOUR PROGRAMMING SKILLS AND YOUR MACHINE LEARNING ABILITIES IN PRACTICE? THEN COME START YOUR CAREER WITH US AT FRAUNHOFER IVI BY WRITING A

THESIS (MASTER) IN INGOLSTADT
PERSON RECOGNITION AND ANONYMIZATION

At the **Fraunhofer Application Center »Connected Mobility and Infrastructure«**, we investigate and develop concepts to design the mobility of the future in a safer, more efficient and resource-saving way. We are dedicated to current research questions on automated and cooperative driving and combine a wide range of competencies in the fields of sensor technology, communication and artificial intelligence. In the process, we use synergies with local industry and work closely with the city of Ingolstadt and its partners.

For our current research projects, we are looking for motivated students who would like to write their final thesis in the field of machine learning / computer vision.

Within the scope of the thesis(es), algorithms for the accurate and reliable anonymization of persons and personal data are to be developed and adapted. Furthermore, reliable object and person recognition should be achieved and completed by project-relevant deep learning applications. The work is highly relevant to us due to its focus on reliable anonymization, especially with regard to the data protection laws currently in force in Germany, and thus represents important building blocks for research and development in the field of autonomous mobility.

Your profile
- enrolled in one of the following or related fields of study: Data Science, Electrical and Information Engineering, Physics, Aeronautical and Automotive Engineering, Computer Science, Mathematics or Mechanical Engineering
- strong background in machine learning, deep learning and/or computer vision
- good programming skills in Python (and C++)
- experience with Tensorflow, Pytroch, object recognition and classification (including theoretical background)
- desirable: initial experience with algorithms such as Mask R-CNN, RMPE, OpenPose or similar
- motivation and ability to work in a team
- initiative and creativity
- very good grades

What you can expect

– versatile and practical projects
– professional supervision
– motivated teams in an open-minded working atmosphere
– a modern research infrastructure and
– flexible working hours

Fraunhofer is the largest organisation for application-oriented research in Europe. Our thematic fields are oriented towards people's needs: Health, safety, communication, mobility, energy and the environment. We are creative, we shape technology, we design products, we improve processes, we open up new paths.

The Fraunhofer Institute for Transportation and Infrastructure Systems IVI in Dresden employs more than 100 scientists in four departments. The institute cooperates closely with the TU Dresden, the TU Bergakademie Freiberg and the Ingolstadt University of Applied Sciences.

The Fraunhofer Application Center »Connected Mobility and Infrastructure« in Ingolstadt as a new structural unit of the Fraunhofer IVI was founded in 2019 and uses the existing synergies from the competences of the THI and the Fraunhofer IVI, especially in its start-up phase. The plan is to develop further fields of technology in the coming years in the areas of autonomous systems, digitalisation in transport and vehicle and road safety.

If you are interested, please contact us, quoting the reference number IVI-Hiwi-00666

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