RESEARCH INTERNSHIP IN SENSOR SYNCHRONIZATION

fortiss is the research institute of the Free State of Bavaria for the development of software-intensive systems with headquarters in Munich. The scientists at the institute cooperate in research, development and transfer projects with universities and technology companies in Bavaria, Germany and Europe. fortiss is organized in the legal form of a non-profit limited liability company. Shareholders are the Free State of Bavaria (majority shareholder) and the Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. www.fortiss.org

We are looking for a Master student who want to complete her/his research internship in sensor synchronization for sensor fusion at data level, focusing more on Electronics/Hardware, which aims to enhance the accuracy and reliability of sensor data integration for autonomous vehicles. And you can also gain experience with sensors, middleware, and machine learning algorithms used in autonomous driving, especially in sensor fusion topic.

_____
Your tasks:

- Literature research on software/hardware methods and techniques for sensor synchronization
- Modification and programming a microcontroller to conduct sensor synchronization in a master-slave manner.
- Assist in the integration of developed solution into our autonomous driving platform.
- Conduct experiments and simulations to validate and optimize the proposed synchronization solutions.

_____
Your profile:

- Master student currently enrolled in Electrical and Computer Engineering (EI) at TUM.
- Practical experience in programming languages such as Python or C++.
- Knowledge in microcontroller or familiar with automotive sensors, such as LiDAR, cameras, radar, GPS, IMU, etc.
- Excellent communication skills in English.

_____
Our offer:

- 12 credits for a 9-week research internship (Forschungspraxis at TUM EI faculty).
- Increased experience with machine learning and real-world automated driving.
- Flexible working conditions, e.g., home office, flexible working hours.
- Continue master thesis on further topics in machine learning or autonomous driving.

Please submit your application with a detailed CV and a current transcript of records.

Contact for details or direct application: Xiangzhong Liu, xliu@fortiss.org

Published on 20.07.2023.