RESEARCH INTERNSHIP IN V2X INTEGRATION VIA GRPC FRAMEWORK

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. The focus is on research into state-of-the-art methods, techniques and tools for the development of software and AI-based technologies for dependable, secure cyber-physical systems such as the Internet of Things (IoT). 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 our autonomous driving project (https://www.fortiss.org/en/research/projects/detail/kosi) where we aim at conducting collaborative behavior planning via V2X communication among automated vehicles.

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Your tasks:

- Develop a gRPC interface for the V2X device to communicate with the Car-PC on fortiss research vehicle.
- Integrate the interface and visualize the received messages in HMI of the autonomous driving stack Apollo (https://github.com/fortiss/apollo).
- Fuse V2X-received information to the perception result of other car sensors.

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Your profile:

- Master student enrolled in TUM faculty Electrical and Computer Engineering.
- Practical experience in programming languages such as C/C++ or Python.
- Familiar with middleware (e.g., Cyber RT or ROS) for autonomous systems is a plus.
- Interest in V2X and previous knowledge in gRPC & Protobuf are welcomed.
- Sound communication skills in English.

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Our offer:

- An international and dynamic work environment with highly qualified colleagues.
- Increased experience with the real-world applications in the field of autonomous driving.
- Close collaborations with industrial and academic leaders in the automotive domain.
- Flexible working conditions, e.g., home office, flexible working hours.
- Possibility to continue with working student and master thesis in the field of autonomous driving.

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

Contact: Xiangzhong Liu, xliu@fortiss.org

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