Master Thesis

Event-based Simulation of Task Scheduling for Middlewares

Your Task
- Develop a discrete event-based simulation of automotive middleware task scheduling.
- Implement the Linux CFS and EDF schedulers for multiple cores and ECUs.
- Implement middleware effect chains on first a single, then multiple simulated ECUs.
- Test the simulation against current task scheduling methods to validate the method.

Your Profile
- Knowledge of C/C++ or similar programming languages.
- Experience with Linux and the ability to read and understand Linux kernel documentation.
- Demonstrate reliability, motivation, and the ability to bring in your ideas.
- Preferred but not mandatory: Experience with NS3, OMNeT++ or other frameworks for discrete event simulation.

Our Offer
- Interdisciplinary team of engineers and computer scientists.
- Regular weekly meetings with the supervisors. More or less supervision is possible if needed.
- Key for students' room and access to snacks and drinks (cost price).

Contact

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Apply Now!

Thinking the Future
Zukunft denken