

3D/AI Programming Student Assistant Job

(up to 80 hours/month)

The Institute for Enterprise Systems (<https://www.uni-mannheim.de/ines/>) at the University of Mannheim combines the transfer of interdisciplinary basic research with industrial research and development projects.

We are currently looking for a student with outstanding motivation and capabilities for several running projects around the topic data-driven test case mining for autonomous systems. The central idea is the development of a simulation environment and test case editor for autonomous driving.

The potential tasks of your team in this project will be:

- Exploring existing open-source driving simulation environments (Carla)
- Develop an interface to record driving and sensor data inside the driving simulation
- Develop a scenario editor addon for the driving simulator to build and simulate test cases
- Add missing features in the driving simulation
- Develop a customizable driving AI (rule based or based on reinforcement learning)

Therefore, we require a strong interest in (and ideally also prior experience with):

- Git-based development workflows
- Python
- Unreal Engine (3D Programming)
- Artificial intelligence and reinforcement learning

The driving simulation and documentation already exist, and need to be extended and maintained in response to current demands. You will be working together closely with a growing team of HiWi's and the PhD researchers working on this project.

Have we aroused your interest?

Apply with your resume, your current transcript of records by email to marton@es.uni-mannheim.de.