Master Thesis

Contact

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Investigation of Language Model-Based Approaches for Autonomous Vehicle Testing

We are seeking enthusiastic Master's thesis researchers to explore the potential of language model-based approaches, such as ChatGPT, in the context of autonomous vehicle testing and validation within simulators. This position offers a unique opportunity to contribute to the intersection of artificial intelligence, autonomous systems, and simulation technology.
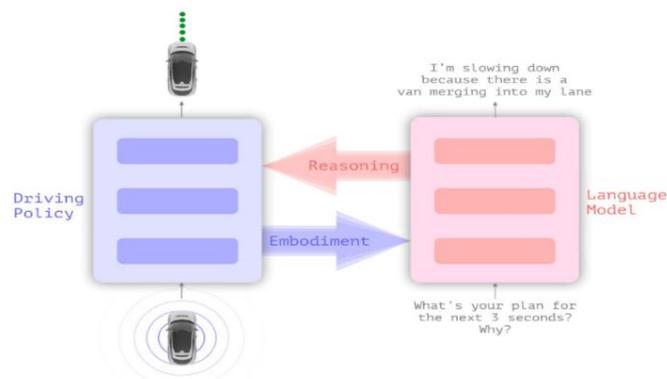
Figure 1. Connecting language model with driving models (Source: wayve.ai)

Responsibilities:

- Conduct a comprehensive literature review to understand the state-of-the-art in autonomous vehicle testing and language model-based AI.
- Design and implement experiments to evaluate the feasibility and effectiveness of using language models for autonomous vehicle testing and validation.
- Analyze and interpret experimental results to draw meaningful conclusions and make recommendations for practical applications.

Your Profile:

- Studies in Engineering
- Strong programming skills (Python, C++, etc.).
- Interest in autonomous vehicles
- Practical exprenice in Machine Learning and ML frameworks
- Knowledge of natural language processing (NLP) and language models is an advantage
- Excellent written and spoken English
- Passion to learn and apply new programming languages and technology concepts

We offer you an chatting-edge topic, close supervision, and the opportunity to develop practical and theoretical skills.

How to Apply:

Interested candidates should submit the following application materials via email to majid.jegarian@kit.edu with the email subject: [Prospective for MA Thesis - "Candidate Surname" – ML01]

- Resume
- Academic transcripts