

## Thesis

Release date: October 2024



Figure 1: Question Answering with  $\mathsf{DriveGPT4}$ 



Figure 2: Lingo 2 by Wayve

# Contact

- R-Bau, R BG.016 Lothstraße 64 80335 München
- 089 1265-3438
- intelligent-vehicles@hm.edu

# **Explainability Score for Autonomous Driving**

In the field of Autonomous Driving, explainability plays a crucial role not only in model development but also in gaining public trust and acceptance of autonomous systems. Natural language explanations, such as scene descriptions or question-answering about the model's decisions, help bridge the gap between complex algorithms and human understanding. However, ensuring that these explanations are faithful—accurately reflecting the model's actual reasoning—remains a significant challenge, especially in safety-critical domains like Autonomous Driving. Furthermore, explanations must be plausible, sounding convincing to humans and be useful. We want to design a score function to evaluate and benchmark autonomous driving explanations.

Hochschule

University of

**Applied Sciences** 

München

#### Your Project

- Review SOTA techniques to evaluate LLMs in Autonomous Driving
- Based on your research, create a score to evaluate the quality of explanations including relevant categories and metrics, applicable in the Autonomous Driving domain
- Evaluate SOTA methods using your score

### Your Profile

- Your studies are preferably in the field of computer science, electrical engineering, or a related field
- You are able to work independently, conscientiously and develop your own ideas based on research
- You have programming experience in Python

### What we offer

- You gain insight into the field of Autonomous Driving and Large Language Models
- Access to High Performance Computers and GPU clusters
- You are supervised directly from a PhD student at the Intelligent Vehicles Lab

Does this appeal to you? Then reach out to us via mail and send a short introduction and motivation, your current grade report, and a CV with a photo.