



## Research Master

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Starting date: 01.10.2023



Figure 1: Mocap suit by rokoko.  
[rokoko.com]

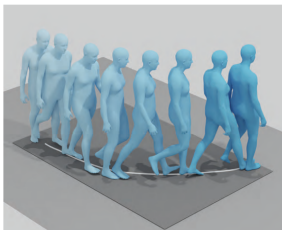
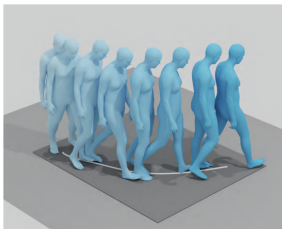


Figure 2: Diverse human motions generated by text-prompt with TEMOS  
[mathis.petrovich.fr]

## Contact

📍 E-Bau, Dachauer Str. 98b  
80335 München

☎ 089 1265-3458

✉ intelligent-vehicles@hm.edu

🏠 iv.ee.hm.edu

🌐 www.linkedin.com



## Research Master | Generative Pose Pipeline

### Description

- By deeply understanding and accurately predicting the interaction between autonomous vehicles and vulnerable road users (VRUs), we can create a future mobility where pedestrians, cyclists, and other road users feel safer and are seamlessly integrated into the transportation ecosystem.
- Therefore, the Intelligent Vehicles (IV)-Lab is looking for a **Research Master (m/f/d)** to support research in the field of autonomous driving starting in the coming winter semester.

### Your Project

- Set up a generative pipeline to create various poses for VRUs (e.g. pedestrians and cyclists) to various topics, for both general and edge cases
- Use VR tools to record poses, e.g. HTC-Vive or a motion capture suit
- Create an HMI through LLMs to use human input for the pipeline
- **Goal:** A pipeline that can create a set of poses of VRU's accurate to the textual input

### Your Profile

- Willingness to learn and interest in the topic of autonomous driving
- Ability to work independently, conscientiously, and accurately
- Previous experience with Python is required
- Previous experiences with Linux, Bash, and git are a plus

### What we offer

- Gaining first experiences in one of the most promising technical fields of modern times
- Guidance and tailored lectures across multiple universities in Munich
- Supervision and close cooperation with a PhD candidate in the corresponding field
- Optional extension to an SHK-position with flat-rate payment

Does this appeal to you? Are you interested in the field of autonomous driving? Then reach out to us via mail and send a short introduction, your current grade report, and a cv with a photo.