# Transparency Assessment of Automated Vehicle

SHAPE-IT Munich Stakeholder Event



ESR 07 Yuan-Cheng Liu Supervisor Prof. Klaus Bengler

October 4<sup>th</sup> 2022

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement 860410



## Objectives

Develope

### transparency assessment method

- → As a tool during HMI design process
- → Answer "what is a transparent HMI?"



#### Previous works

**Developed** and **validated** the transparency assessment method in an **online-study** [Study 1]

Validate the proposed method in a **simulator-study** and incorporated **psychophysiological** measurements ([Study 2] with ESR 01)



## Findings

- Participants with higher **ADS experiences** level had more **functional transparencies** (i.e., understanding of the HMI) [Study 1]

- **Different subjective workloads** (NASA-TLX) among different HMI designs [Study 2]









#### What's next?

- If there are **inconsistent** in subjective and objective workload measurements?
- How to bring the proposed method be applied in test-track study?
- Develop **interactive-online-study** and compare it to simulator study for faster HMI development

