# Institute of Automotive Technology

## **F**uture **T**ransport **M**obility

### 2025 Milestones



Technical University of Munich
School of Engineering and Design
Department of Mobility

Munich, 09.12.2024

# Autonomous Vehicle Lab

## Autonomous Racing

- Autonomous head-to-head racing in two competitions (IAC & A2RL)
- Development of a full-stack software
- Focus on interaction at the vehicle dynamics limits
- Overtaking at speeds of 270 kph
- Victory at the famous Indianapolis Motor Speedway ($1 million dollar competition) and the Abu Dhabi Autonomous Racing League (A2RL)



# Next Milestone Autonomous Racing

**Abu Dhabi 04/2025** **Monza 06/2025**




**2024 Event Format:**

- Single Vehicle Hot Lap Qualifying
- Attack & Defend: Two Vehicle Race
- Multi-Vehicle Race (Top 4 Teams)

**Next Steps:**

- Multi-Vehicle Qualifying Session
- Multi-Vehicle Sprint Races in Knockout Tournament
- Full Multi-Vehicle Races

# Autonomous Vehicle Lab

## EDGAR Research Vehicle

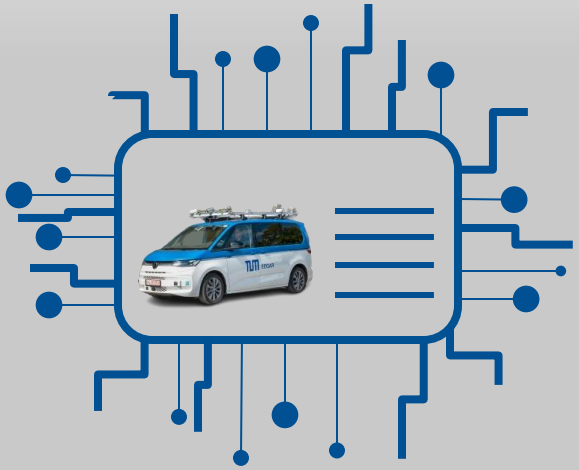
- Autonomous driving for public roads
- Collaboration with multiple TUM institutes to develop a common software stack
- Focus on edge-case scenarios
- Open-source software and data strategy
- Successfully demonstrated as an open to the public self-driving *Wies'n Shuttle* during the most hectic time of the year in Munich



# Next Milestone EDGAR




## Autonomous-Driver License



- Public demonstration of an official driver's license test with our self-driving research platform EDGAR
- Open challenge in partnership with IAA Mobility and TÜV Süd, inviting OEMs and self-driving service providers to participate

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