Category: Competition, 2021, Awards 2021

DAIMLER



Daimler has a vision of a future with fewer traffic accidents and less stress. We are working to achieve this vision through automation, electrification and connectivity. Automation is one of the biggest drivers of change in the transportation sector. Tremendous progress has been made in the field of artificial intelligence (AI) and machine learning for automated driving systems. This technology substantially improved perception capabilities and is now an integral part of our sensing and perception systems.

For the second year our special award focuses on **AI innovations within your overall system and development process**. How do innovative machine learning concepts and their implementations drive your overall vehicle performance? How does artificial intelligence help you to build a better car? What makes your car intelligent in understanding and acting within its environment?

Please focus on the following criteria:

- Overall process for selecting, designing, and implementing AI / machine learning technology in view of improving the competitiveness of your vehicle
- Innovation in your machine learning technology and tooling within your system modules and design process
- Data strategy, data management, data annotation, virtual data, etc.
- Training, validation, and testing strategy and the underlying software processes

Examples might include:

- Novel machine learning concepts used for sensor-based traffic cone detection and map learning
- · Reinforcement learning for optimal vehicle control
- Innovative sensor simulation tools to generate virtual sensor data for training your machine learning models

Ideally you can back up your presentation by empirical proof of the actual value(s) achieved for one or more performance parameters. Show us what makes your team and your innovation outstanding!

Your prize

The Top 3 will be awarded with 2.000 € for 1st place, 1.500 € for 2nd place, and 1.000 € for 3rd place.

Your submission

The "Daimler Driverless AI Award 2021" is open to all teams participating in **Formula Student Driverless** in Hockenheim this year. Your team can apply for the award by submitting an abstract (max. 3 pages), which elaborates on your AI innovations. The abstract should be in PDF format and should not exceed 10MB.

The judging

Daimler AG, in cooperation with FSG, will contact the teams who have made it onto the shortlist by Monday evening, 9th August to arrange a virtual time slot on Wednesday, 18th August 2021 for a 30-minute (virtual) time slot for judging. Your presentation team may include up to 6 people. Teams are advised to prepare suitable documentation and presentation material.

Please upload your team's abstract via the FSG website (MyTeam -> Competitions -> Deadlines) by Monday, 2nd August 2021.

We are looking forward to discussing your AI innovations and wish you the best of luck!

