MIT Motorsports believes collaborating on a driverless FSG car will be mutually beneficial for the TU Delft and MIT racing teams. Our teams and schools have complementing technical strengths that together have potential for great results. A few of us have taken the time to visit your team in the Dream Hall and see that our team members' personalities and our team cultures are very compatible. We are all super passionate about building performant racecars and keen on tackling the hard technical problems that driverless presents.

A collaboration with MIT would offer strong advantages for Delft Driverless. In particular, from the start, we see a few key offerings:

- Tangible:
    - Access to our DGX1 and other GPU/computing clusters for training models and vehicle simulations
    - Already-obtained initial funding for the team ($10K). In the future, a collaboration would allow Delft much easier access to US capital!
    - Support and guidance from leading professors in related fields (e.g. Prof. Sertac Karaman, OptimusRide co-founder)
    - World-class electrical, controls, machine learning, and robotics graduate research students
    - Strong interest in driverless technology among the faculty and student body, with previously assembled team ready to start work with Delft

- Intangible:
    - MIT brand for sponsor acquisition and marketing
    - International network of students, faculty, and alumni
    - Connections to American employers like Tesla, Google, Apple, and NVIDIA, where our driverless team members have worked

We primarily see our involvement in any collaboration lying in the following areas:

- Choosing and validating compute architecture and data communication on the car
- Perception (sensor data fusion and processing, perception model development)
- Path planning and motion control (designing and implementing algorithms, and designing experiments for verification and tuning)
- Design of accurate simulators, and simulated validation
- Further fundraising

We see TU Delft's team being primarily responsible for:

- Designing and implementing sensing and actuation for one of the DUT cars
- Collaborative design of perception, planning, and control software with MIT
- Collecting data, testing developed models on car, and sharing results with MIT
- Further fundraising and competition logistics

Our team does not believe that MIT is in a position to single-handedly compete in FSG Driverless due to the clear logistic challenges associated with competing in Germany. For one, shipping our car over the ocean is a non-trivial challenge due to shipping regulations for batteries and the constraints it puts on our development timeline. We also believe that Delft has one of the strongest and most mature cars in the FSG field. Use of these cars would allow us to focus our engineering efforts on the aspects of driverless design that are MIT's strengths.

Thanks for your consideration.

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