Jun Meng

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Education

10/2020 – Present **Technical University of Munich** —— Munich, Germany
M.Sc., Automotive Engineering
Interested fields: Autonomous driving, ADAS
Object detection, Software development with ROS etc.

10/2019 – 10/2020 **Gap year: German learning** —— Dortmund, Germany

09/2015 – 06/2019 **South China University of Technology** —— Guangzhou, China
B.Eng., Vehicle Engineering
The curriculum plan was mainly based on mechanical engineering and vehicle dynamics.
GPA: 3.78/4.0 on the Chinese Grading scale, **Ranking: best 5%**

Languages

English: CET6 (B2)
German: C1
Chinese: native

Software and Programming Skills

Python, C/C++, ROS, ROS2, MATLAB, Simulink
CATIA V5, Auto CAD, Solidworks
Microsoft Office

Driver's License

Klasse B (German)

Hobbies

Handcraft, Photographing, Hiking, Karting driving

Internship

Porsche Engineering

03/2023 – present **Driver Assistance System: Highway Pilot Function**

Project Experience

Technical University of Munich

08/2022 – 12/2022 **Semester Thesis: Autonomous Driving Simulator and Benchmark on NRP**
Develop the AD simulator basing on Neuro-Robotics Platform. Implement YOLOv5 and SGBM algorithm in ROS2 galactic to do object detection and stereo depth estimation in real-time. Take the 3D BBox from KITTI tracking data to calculate the ground truth distances.

10/2022 – 02/2023 **Hiwi an ENSNARE TUM: Member of UAV subteam**
Work on the ground camera. Capture video stream in real time using a usb-connected SONY a7r4 to detect the AprilTags both in the surroundings and on the drone to correct the UAV's pose, with the purpose to mount another AprilTag to the supposed position on the building.

10/2022 – 02/2023 **Formula Student: Member of Subteam Autonomous Software, TUfast e.V.**
Work on state estimation and mapping. Detect positions of cones in global map and locate the vehicle in it. Configure the parameters of fastSLAM algorithm to improve the performance.

09/2022 – 10/2022 **Teaching Assistant: [MW0450] Industrial Software Development for Engineers / C++**
Duties included teaching tutorials, check submitted code, cross compile and test on the hardware.

South China University of Technology

12/2018 – 05/2019 **Bachelor's thesis:** Design and Testing of FSAE-Racecar Aerodynamic Kits
Based on the design of the combustion racecar in the season 2018, carried out track testing to verify the actual aerodynamic effect compared to the CFD simulation results. Used linear displacement sensors to collect raw data of suspension displacements of every single wheel. Used Race Studio to process and analyze the test data.

11/2017 – 06/2019 **Formula Student China: Leader of Aerodynamic & Chassis, SCUT Racing**
Designed and manufactured Aero-kits to produce downforce efficiently for a single-seat open-wheel FSAE-racecar. Using CATIA V5 for 3D modeling and StarCCM for CFD simulation.
Worked for the seasons of 2017, 2018, and 2019. Participated in Formula Student China 2017, responsible for the Design Presentation of our combustion racecar's aerodynamics and ergonomics.

Awards

03/2017	Second-class Scholarship SCUT
11/2017	Third prize (as a member) of Formula Student China 2017
03/2018	GAC Enterprise Scholarship
04/2018	Finishing Award of Chinese University Students Mathematical Modeling Competition
12/2018	Third-class Scholarship SCUT
06/2019	Excellent Bachelor Thesis 2019, School of Mechanical and Vehicle Engineering, SCUT