Hongguang Chen

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Experienced software engineer specialized in autonomous driving systems integration. Skilled in sensor module design, and automated testing. Passionate about advancing autonomous technology.

Education

MS **Chalmers University of Technology**, High Performance Computation — Sept. 2023 to June 2025
BS **South China Normal University**, Telecommunication Engineering — Sept. 2015 to July 2019

Skills

Languages:

- C/C++
- Python
- Shell script

Framework:

- ROS/DDS
- Pytorch
- Tensorflow

Software:

- VScode
- git
- jira
- conference

Experience

Inceptio, Software Engineer
Autonomous Driving System Integration and Development. (Linux, C++, DDS, Lidar, Radar, Camera)

Shanghai, China
April 2021 to June. 2023
2 years 2 months

- Led the development of Inceptio Process Manager (IPM) to optimize SOC module startups and monitoring modes.
- Streamlined vehicle update processes by decoupling sensor upgrades from core system dependencies.
- Architected a universal sensor diagnostic system with real-time monitoring dashboards for fleet-wide operational efficiency.
- Developed robust data processing tools for efficient data quality assessment.
- Automated testing script development, accelerating error detection and improving development efficiency.

Sensetime, Researcher
Led development of Sense Rover (Autonomous Driving Demo) on Nvidia Tx2 platform. (C++, Python, ROS, PyTorch)

Shanghai, China
Dec. 2019 to April 2021
1 years 6 months

- Developed sensor drivers and algorithm abstraction layer for seamless integration.
- Oversaw open-source hardware platform migration.
- Authored case studies and demo code for user guidance.

Sensetime, Researcher Intern

Shenzhen, China
Oct. 2018 to May 2019
8 months

- Implemented a self-driving demo, including control system prototypes, network optimization, and data management.
- Developed a Driver Monitoring System (DMS) using MTCNN, implemented a training framework, and optimized network structures.

Language

Chinese: Native

English: B2