Autonomous Vehicle for Logistics and Delivery Services

Application

To facilitate the contact-less freight transportation in the post COVID-19 world, an autonomous logistic vehicle is developed to reduce direct human contacts, delivery time and freight costs; improve fuel efficiency and truck utilization.
Global self-driving truck market is expected to reach USD$1,699 million by 2025[1]

Technology

The autonomous vehicle is composed of hardware and software systems including sensors, cloud server modules and algorithms to achieve autonomous navigation with a dynamics-based Model Predictive Controller (MPC)

Fig 1. Test of the autonomous vehicle in Shenzhen, China, (left) and The Hong Kong University of Science and Technology (HKUST) (right)

Talk to Us

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Advantages

- On road running distance > 2,500km without any incidents
- Total avoided contacts > 67,600
- Granted a stage 0 moving permit from Hong Kong Transport Department (HKTD), ready to get another permit in a month
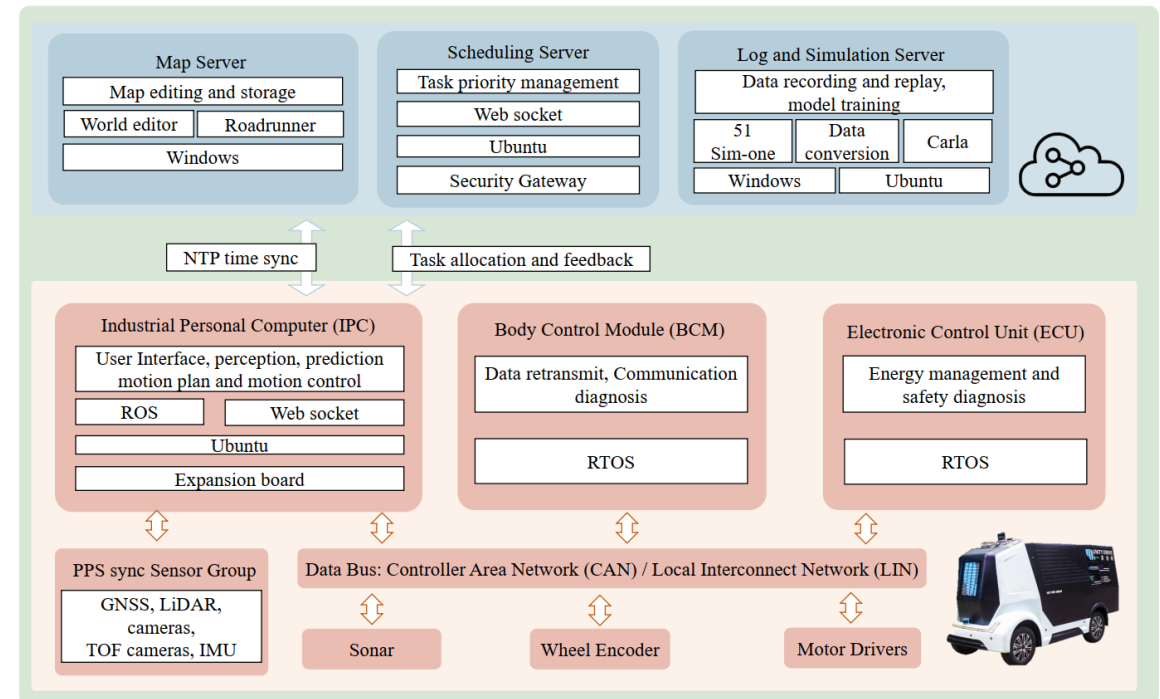- Achieved level 4 autonomy

Fig 2. The software architecture of the autonomous vehicle.

Intellectual Properties

Chinese Patent Applied, 202010104509.6 & 201810029397.5

1. Self-Driving Truck Market by Level of Autonomy and Industry Vertical – Global Opportunity Analysis and Industry Forecast, 2020 – 2025 by Allied Market Research