

HKPC TechDive -Smart City

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Autonomous Delivery Mover, MiniMover

Hong Kong Productivity Council 香港生產力促進局 Automotive Platforms and Application Systems R&D Centre 汽車科技研發中心

TECHNOLOGIES



DEEP LEARNING AND SENSOR FUSION



Sensor fusion demonstration – Object recognition with distance

LiDAR - Simultaneous Localization And Mapping (SLAM)

- > Equipped with a sensor suite that includes cameras, an integrated DPGS/IMU system, LiDAR and Ultrasonic
- > Through the technology of deep learning and sensor fusion, this low-speed autonomous mobile platform can conduct path planning with collision avoidance of stationary or moving obstacles

MAJOR BENEFITS

APAS REAR STREE



Plan suitable path with collision avoidance via the sensor fusion with deep learning

Perform last-mile delivery tasks in a more frequent and less labour intensive way



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<u>R&D project funded incubated by MTR x HKPC</u>

• Like a **co-worker**, assisting station operators to do

regular inspection

- Patrol during non-traffic hours (NTH) to check facility conditions, including lighting and signage
- Enhance railway service and operational efficiency



APPLICATIONS

- Last-mile delivery
- Indoor delivery
- Inspection robot



HATCHING POINT FOR FUTURE EXPANSION IDEAS



HKPC 11 73 **INSPIRING DISRUPTION**

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