How to make business with LiDAR? Perspective of LiangDao

Sikun Ma

Wiesbaden, Germany | 01. Dec. 2022

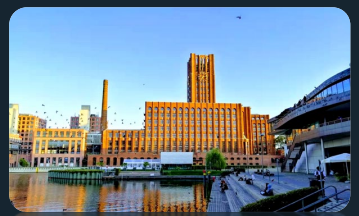
Copyright © 2022 LiangDao GmbH

LiangDao – Light up the way.

- Start-up founded in 2018 in Germany and China
- LiDAR System Provider for Automotive Industry and Smart City
- Core Competence: LiDAR Perception Systems
- Close Cooperations with OEM Customers and Cities
- Innovation Award of Landeshauptstadt München 2021; Top100 Innovator in Germany 2022

Company Locations

Munich
HQ of LiangDao Germany



Berlin
European R&D center

Beijing
HQ of LiangDao Intelligence

Shanghai
Business center
of LiangDao Intelligence

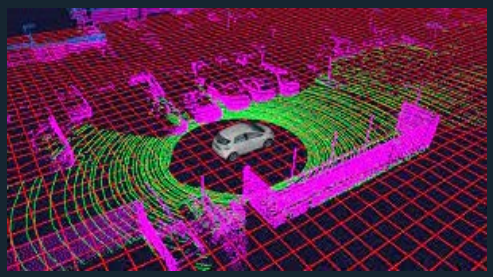
Confidential © 2022 LiangDao GmbH

Use cases of LiDAR Perception System

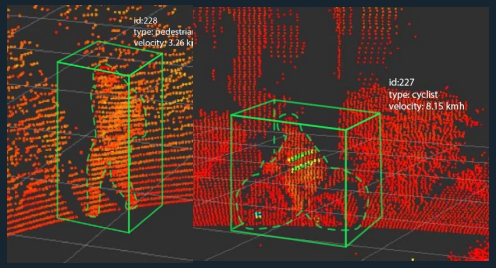
Collision prevention

3D tracking of accidents

Traffic flow optimization



Parking spot allocation



Pedestrian & bycicle detection

City layout planning

Event traffic management

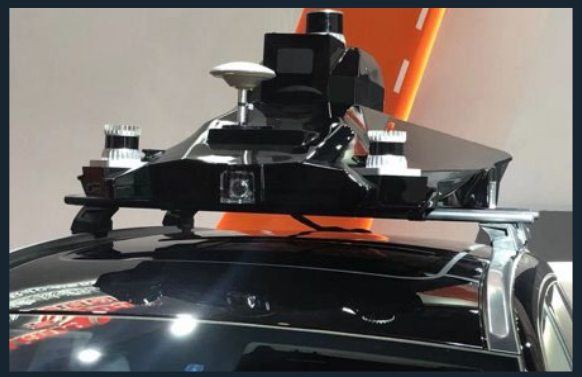
Traffic light control for vulnerable road users

Confidential © 2022 LiangDao GmbH

LDCompass System

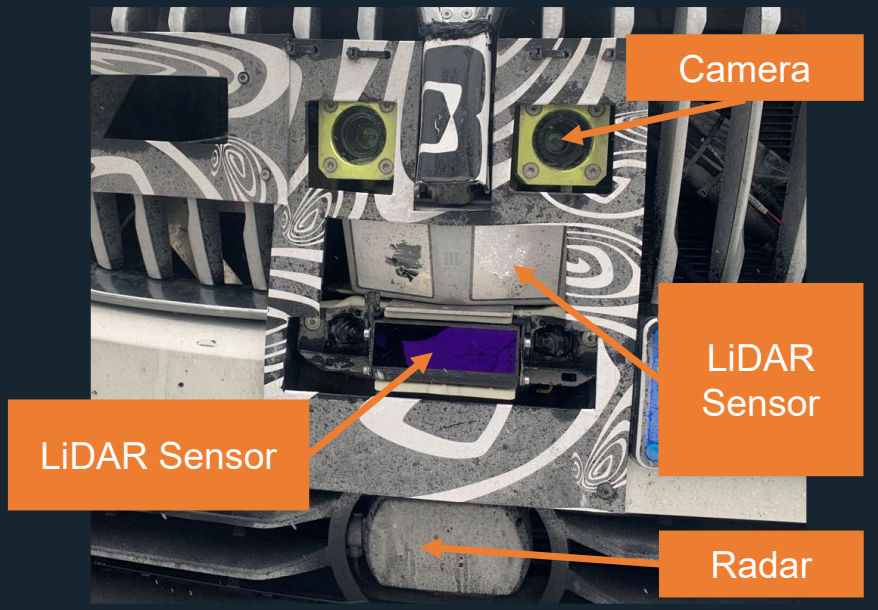
LDCompass® Multi-LiDAR perception system

LD Compass System： 1xOS2-128 + 3xOS0-64 + OxTS 3000



Confidential © 2022 LiangDao GmbH

LiangDao Perception Algorithm: highly adaptive



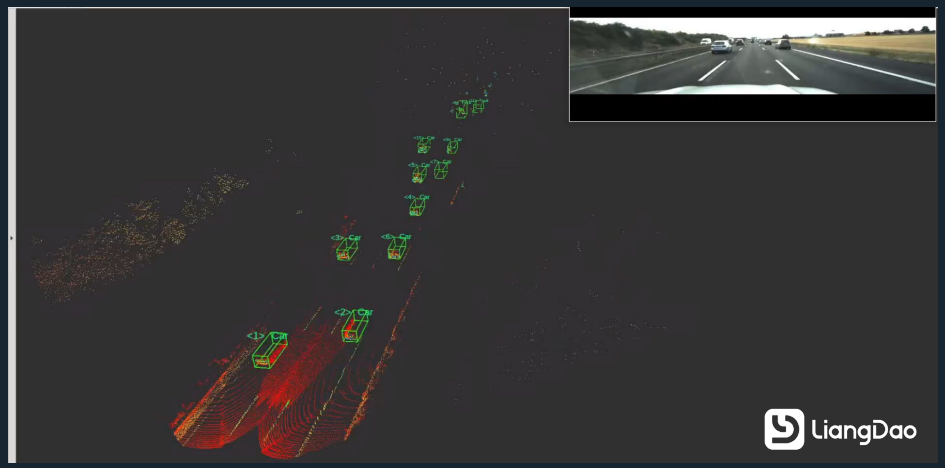
LiangDao Software enables the **automotive** industry to use best in class **multi sensor setups** for **autonomous**, **advanced driving** and **assistant systems**

Confidential © 2022 LiangDao GmbH

LiangDao Perception Algorithm: highly adaptive

Real time Perception

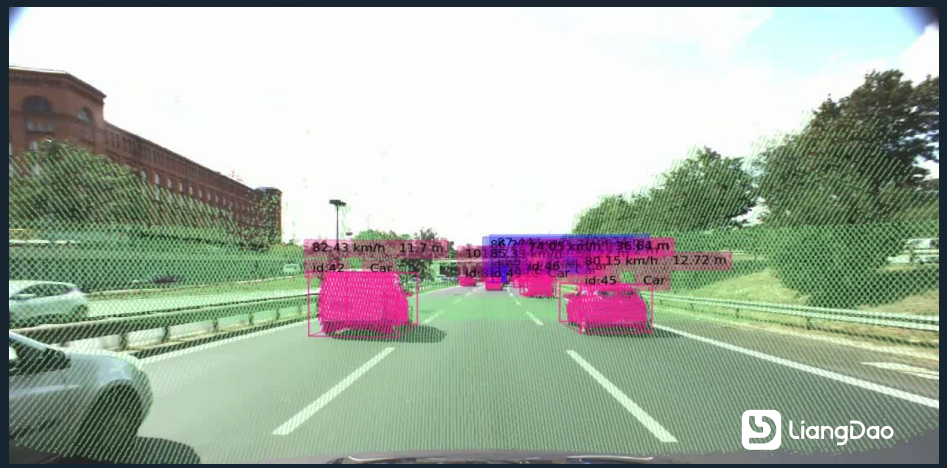
RS M1 LiDAR



InnovizOne LiDAR

Offline Perception/Ground truth

Innovusion Jaguar 300 LiDAR



Fusion of Camera and LiDAR

Confidential © 2022 LiangDao GmbH

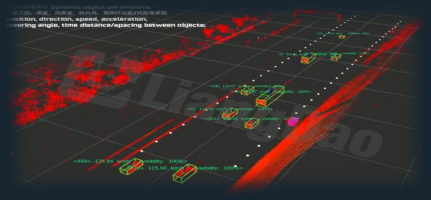
LiangDao Perception Algorithm

LiangDao

LiDAR HW Manufacturer

Diversified raw data from hardware

LiangDao: Self developed LiDAR sensing algorithm



LiDAR point cloud data processing

Vehicle Manufacturer Customer

Perception data and ground truth output

Core advantages of LiangDao's algorithm

- ✓**compatibility** with all mainstream LiDAR hardware products
- ✓**compatibility** with differentiated driving environments
- ✓**compatibility** with mainstream computing platforms

Confidential © 2022 LiangDao GmbH

LiDAR Sensor System for Smart City

LiangDao

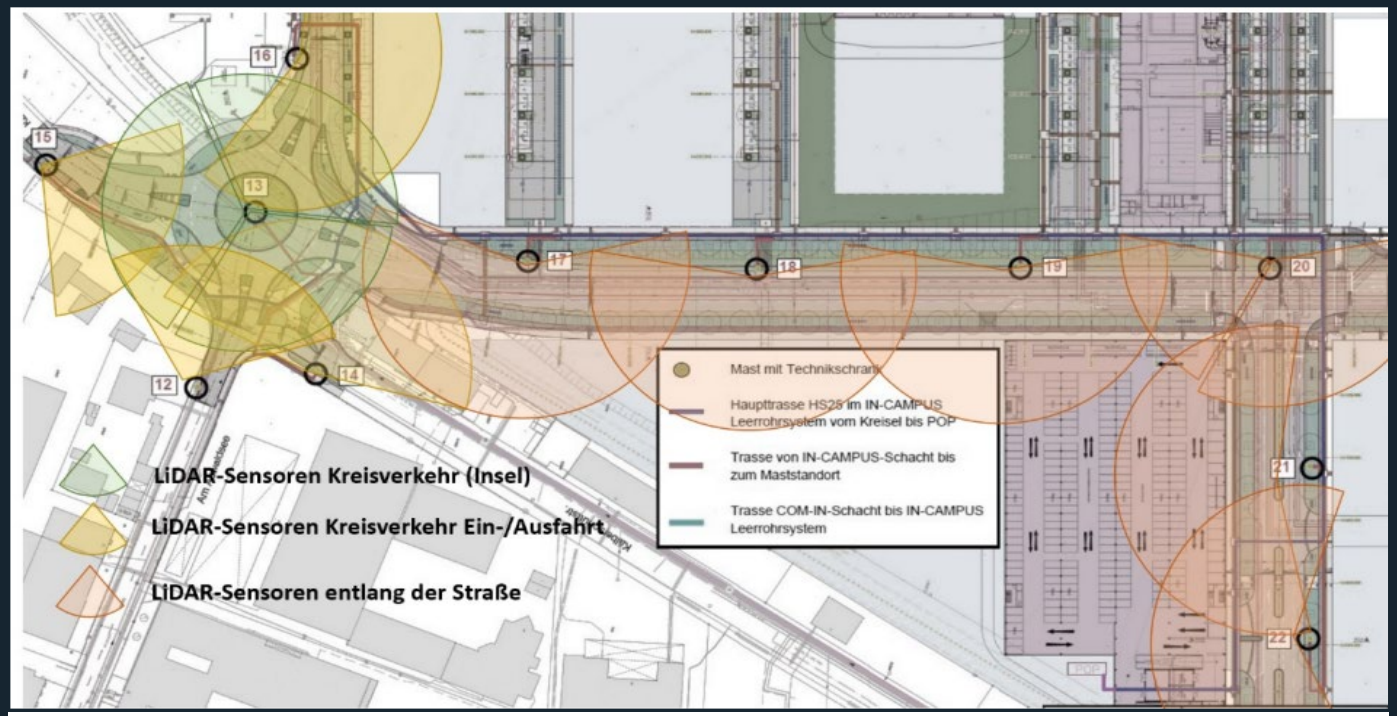
LDTelescope® Roadside sensing solutions

Real-time 3D Environment Perception, Object Detection and Tracking

Confidential © 2022 LiangDao GmbH

Industrial Research Projects

Funded by German Federal Governments



Research project:
5GoIng

Focus:
Connected mobility in Ingolstadt

Realization of open development and demonstration platform for 5G applications

Gefördert durch:

Bundesministerium für Digitales und Verkehr

aufgrund eines Beschlusses des Deutschen Bundestages

Confidential © 2022 LiangDao GmbH

How to make business with LiDAR?

01 Ability to find and create countless use cases

02 Compatibility of our perception system

03 Connection with partners and customers in China and Germany

Confidential © 2022 LiangDao GmbH

LiangDao

THANKS

LD LinkedIn

LD YouTube

ENLIGHTEN
FUTURE
MOBILITY