Mobility Solutions

2025

Tools for Mobility and Mobility Testing

01 AI Edge Development Hardware

02 Test Data Monitoring Platform

03 Data Set Preparation Platform

04 Autofusion Software

05 ADAS Warning

06 Driver Scoring

07 Vehicle dashboard warning detection

08 Dynamic Object Localization

09 Static Object Localization

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01 AI Edge Development Hardware

Applications:

- On-Board Vehicle applications
- Connected vehicle
- Logistics and delivery

Features:

- Data transmission via cellular connection or local network
- AI Edge computing
- Default ADAS warnings for forward collision, pedestrian, lane departure
- V2X communication
- Configurable via mobile app.

Hardware: MB-Remote

- ADAS warning indicator and speaker
- Forward facing camera
- GNSS

- Wifi/ Bluetooth module
- IMU
- Cellular network (2G, 3G, 4G, LTE)
- CAN-Bus Module, 2 channels
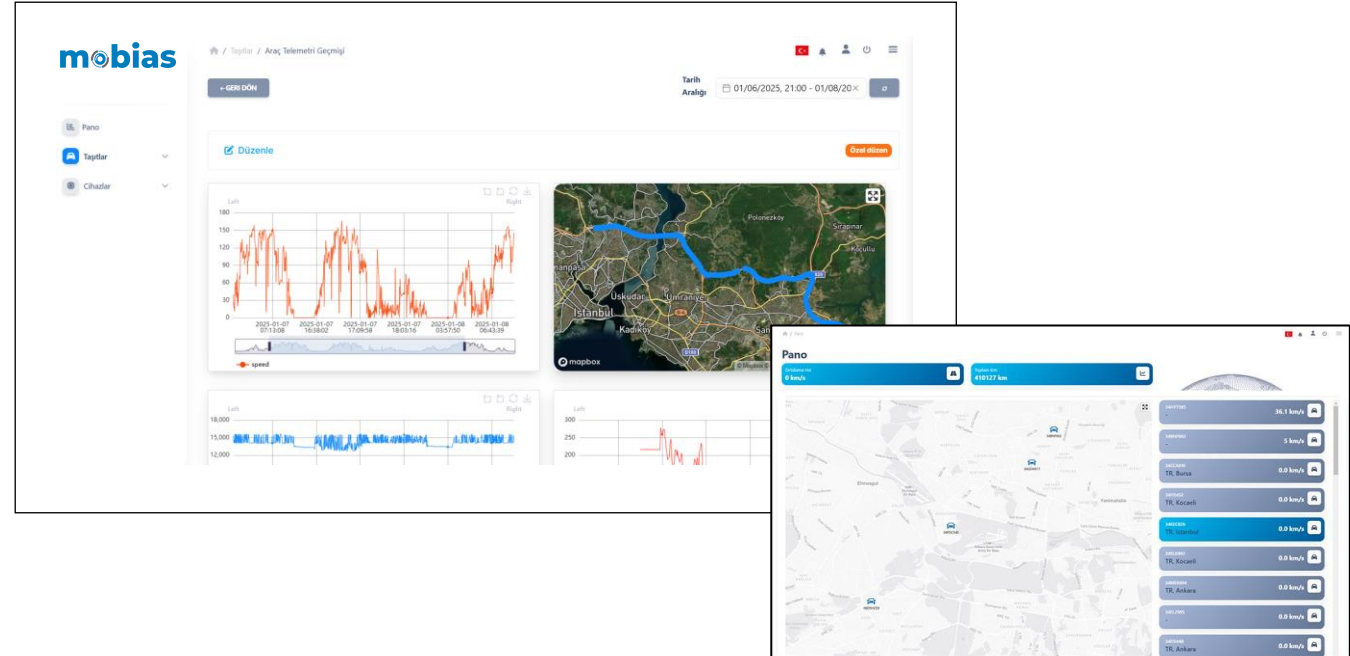- Powerful AI Processor

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Applications:

- Data collection and monitoring of test fleets

Features:

- Data types: location, CAN-bus data, vehicle and driver information, vehicle track data
- Local server or cloud
- Continuous monitoring and insights
- Customizable industry-specific reports
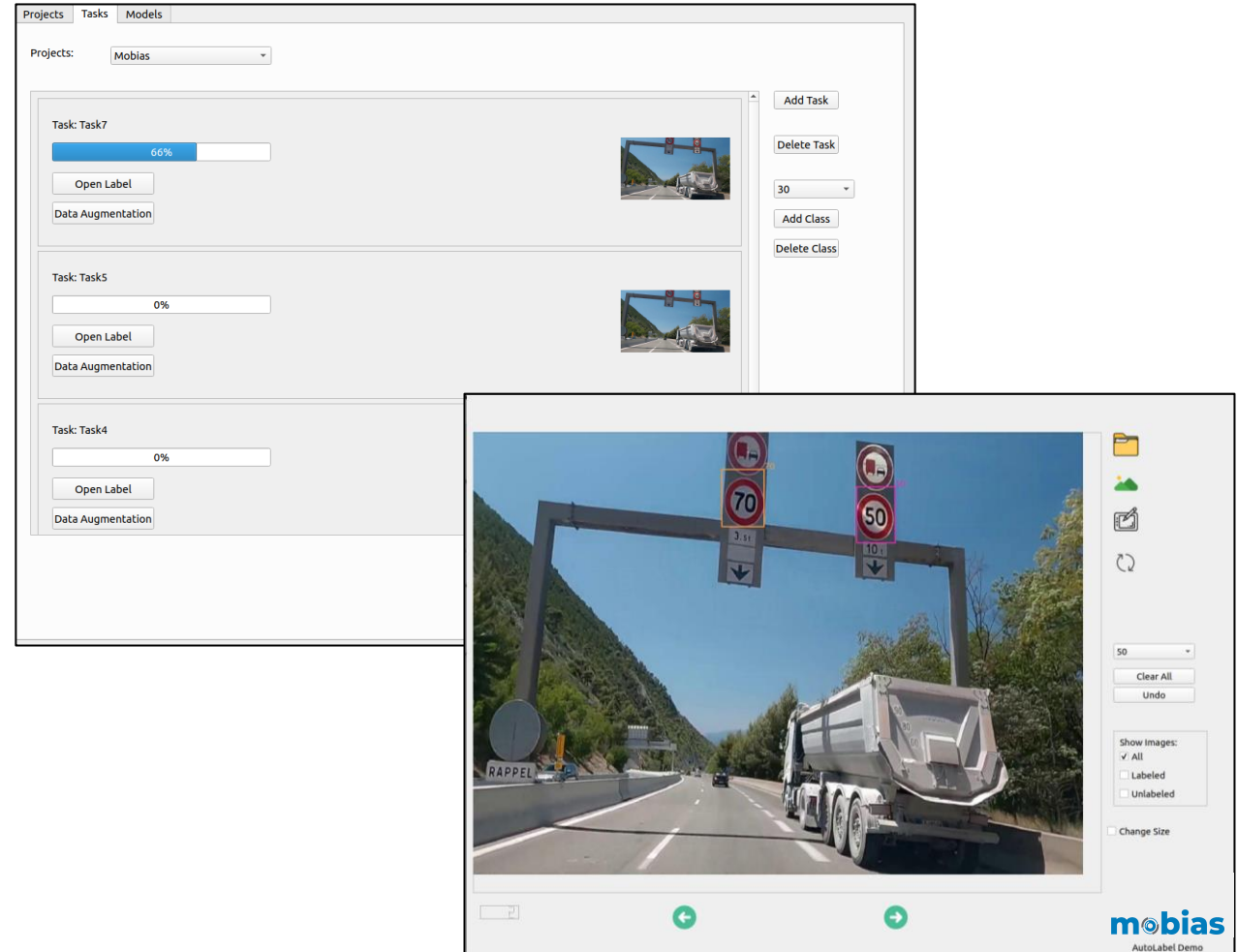- Scalable and device-compatible design

Software: MB-Remote

Applications:

- Enables easy data labeling and augmentation for data set creation.

Features:

- User-friendly interface
- Fast and accurate labeling operations
- Saving time and reducing labeling errors
- Easy use of different data augmentation techniques via the interface

Software: MB-AutoLabel Tool

04 Autofusion Software

Applications:

- Automatic Lidar and camera calibration with artificial intelligence support (99.9% success rate)

Features:

- Fast and accurate automatic alignment with artificial intelligence
- Compatibility with a variety of lidar and camera hardware
- Faster calibration than traditional methods
- Eliminating the need for complex markers or dedicated test areas

Software: MB-Autofusion

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Applications:

- Use for special applications
  - Pedestrian collision warning
  - Forward collision warning
  - Lane departure warning

Features:

- Embedded AI based software to detect pedestrians, vehicles and lanes

- "forward collision warning" and "pedestrian collision warning" via mobile application

- "lane departure warning" via mobile application for unintended lane changes

Software: MB-ADAS

Hardware: MB-WeLog

- Wifi/ Bluetooth module
- IMU
- Cellular network (2G, 3G, 4G, LTE)
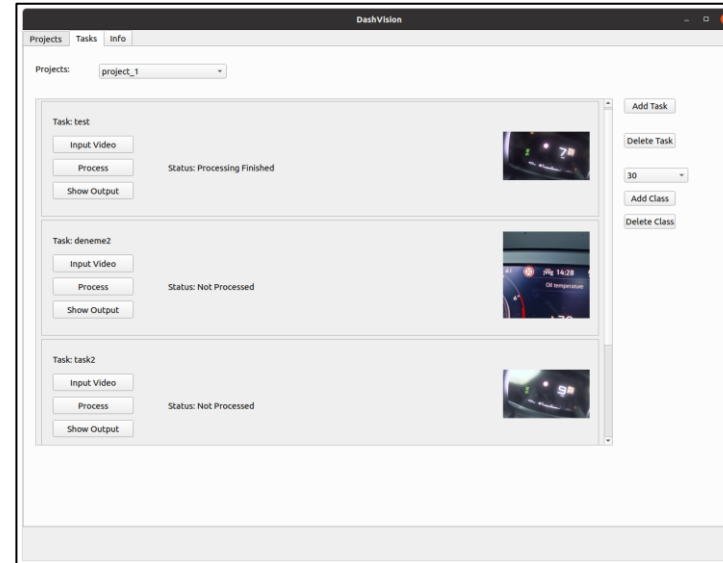- CAN-Bus Module, 2 channels
- Powerful AI Processor

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Applications:

- Driver scoring using telematic data and ADAS metrics
- Insurance, improving driving behaviour

Features:

- ADAS scoring metrics based on forward collision, lane departure and pedestrian collision warnings
- Better driving risk analysis with ADAS metrics
- Overspeed, fuel consumption and dangerous driving information using data

Software: MB-Mobil
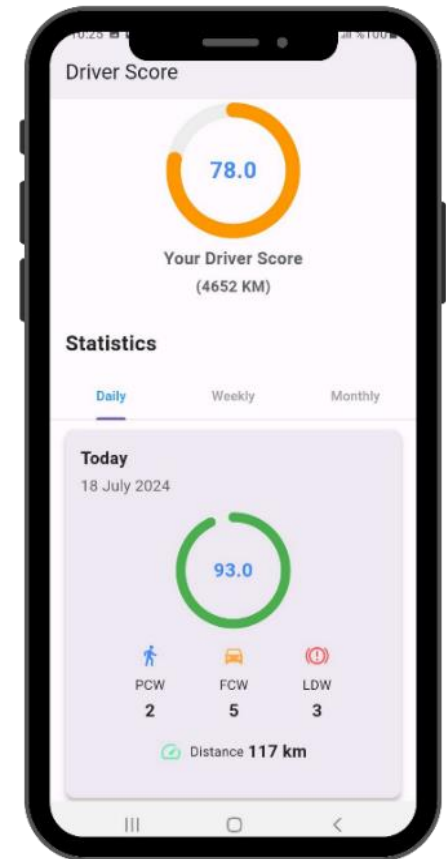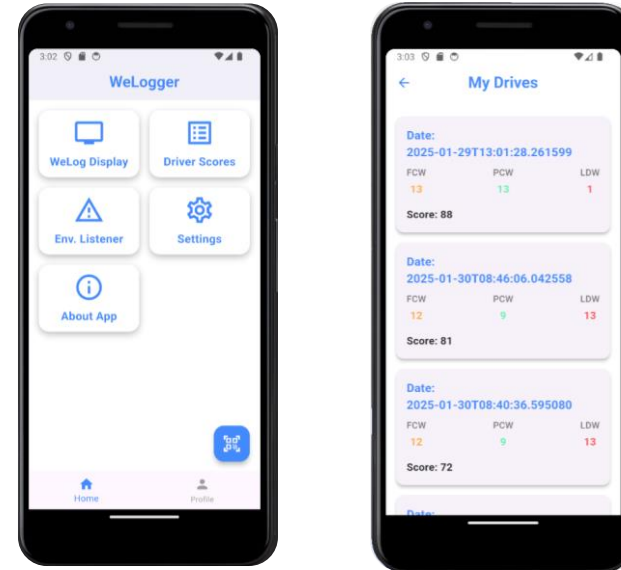
Hardware: MB-WeLog - Optional

- Wifi/ Bluetooth module
- IMU
- Cellular network (2G, 3G, 4G, LTE)
- CAN-Bus Module, 2 channels
- Powerful AI Processor

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Vehicle Dashboard Warning Detection

Applications:

- Generation of time-synchronized data of vehicle dashboard warnings

Features:

- AI-supported automatic grouping
- Ability to process video data recorded with any hardware
- Ability to provide results at low image quality
- Fast and highly accurate detection with dual-layer AI model

Software: MB-Dashview

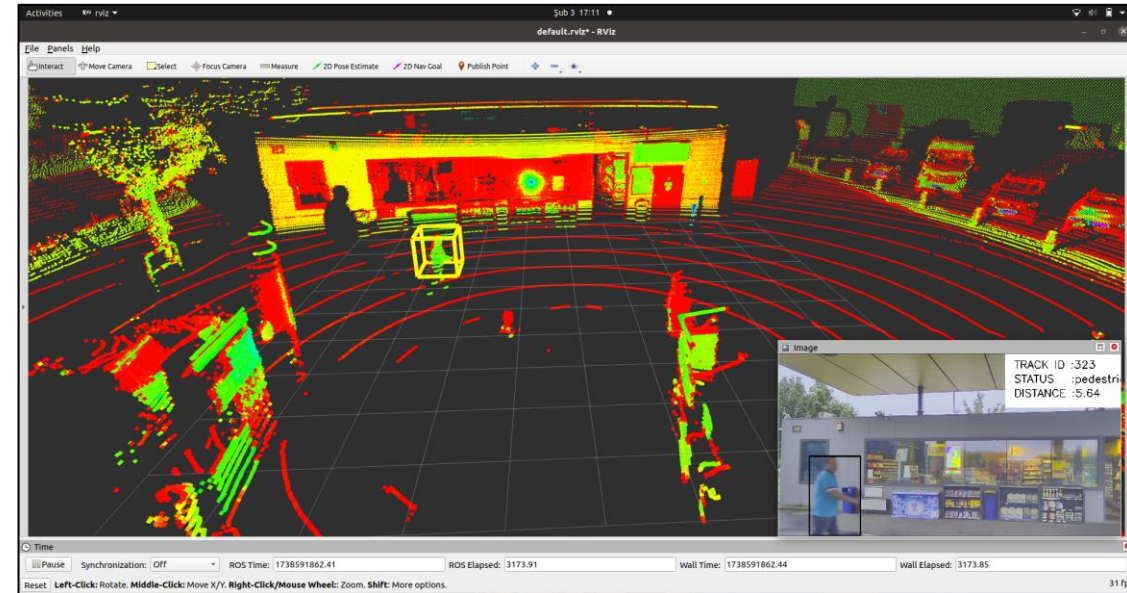# 08 Dynamic Object Localization

Applications:

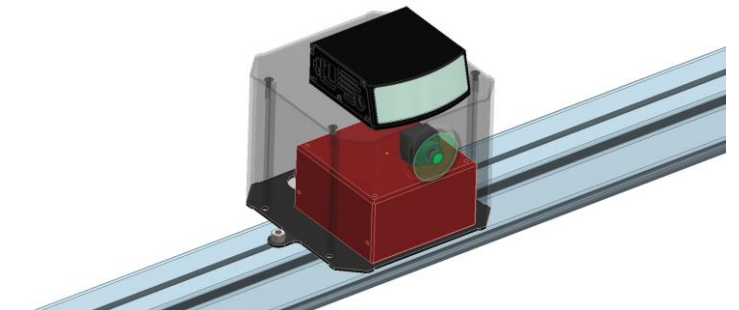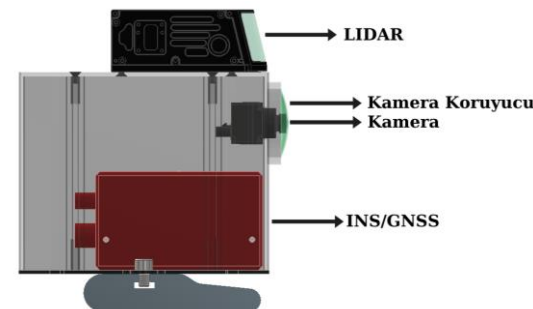- Validation system for dynamic object detection around vehicle.

Features:

- Precise position detection of pedestrians, cyclists and other obstacles relative to the vehicle
- Highly accurate speed and position information calculated with data collected from Lidar odometry without the need for GNSS data
- GNSS data correction with LIO (LiDAR-Inertial Odometry) support

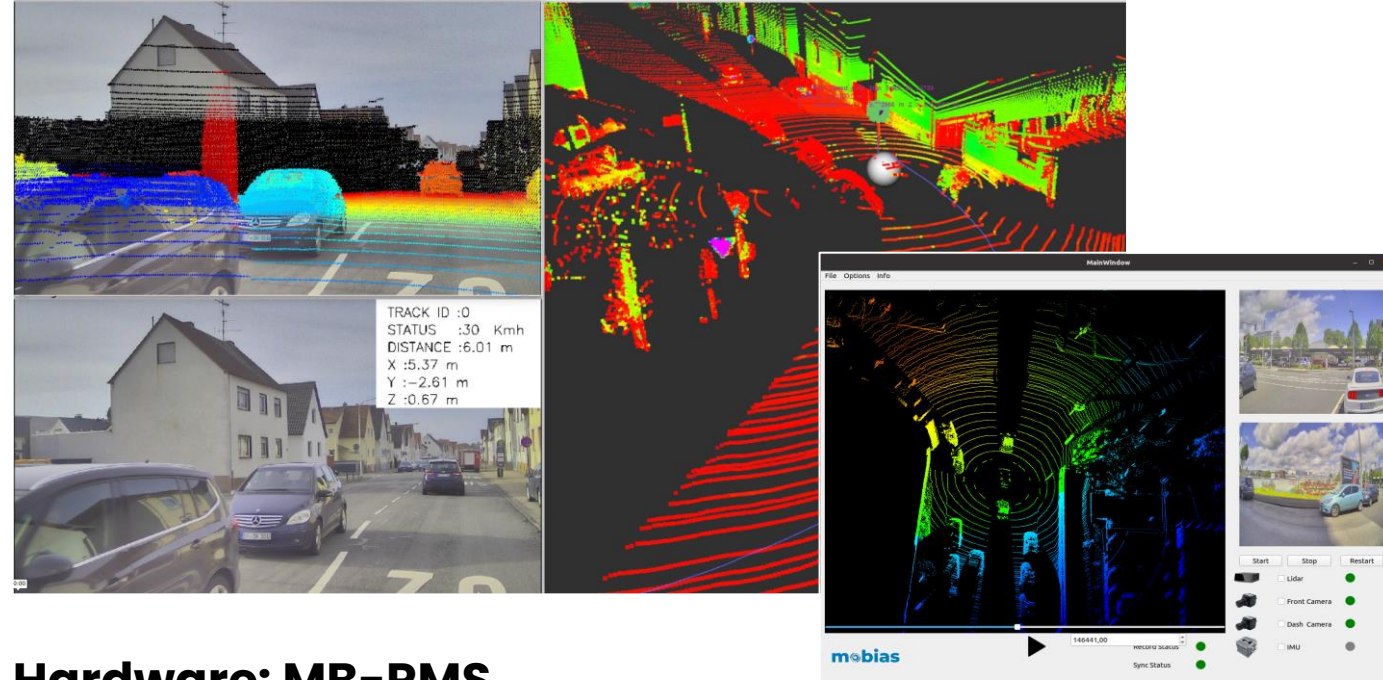**Software: MB- RMS Software Module**

Hardware: MB-RMS

Applications:

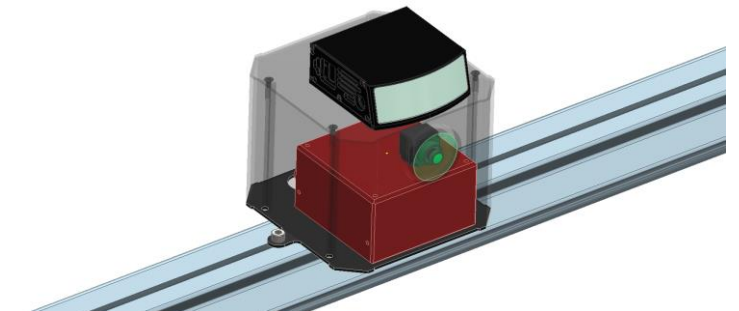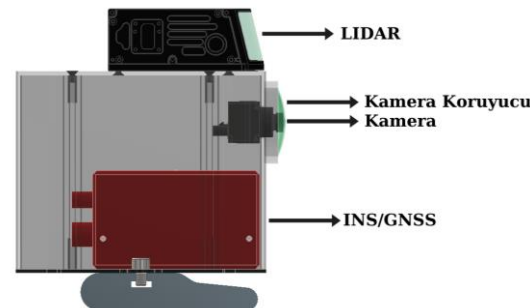- Validation system for speed sign detection and localization on roads.

Features:

- Traffic sign and precise location detection
- System performance evaluation

Software: MB-RMS Software Module

Hardware: MB-RMS

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Thank You!