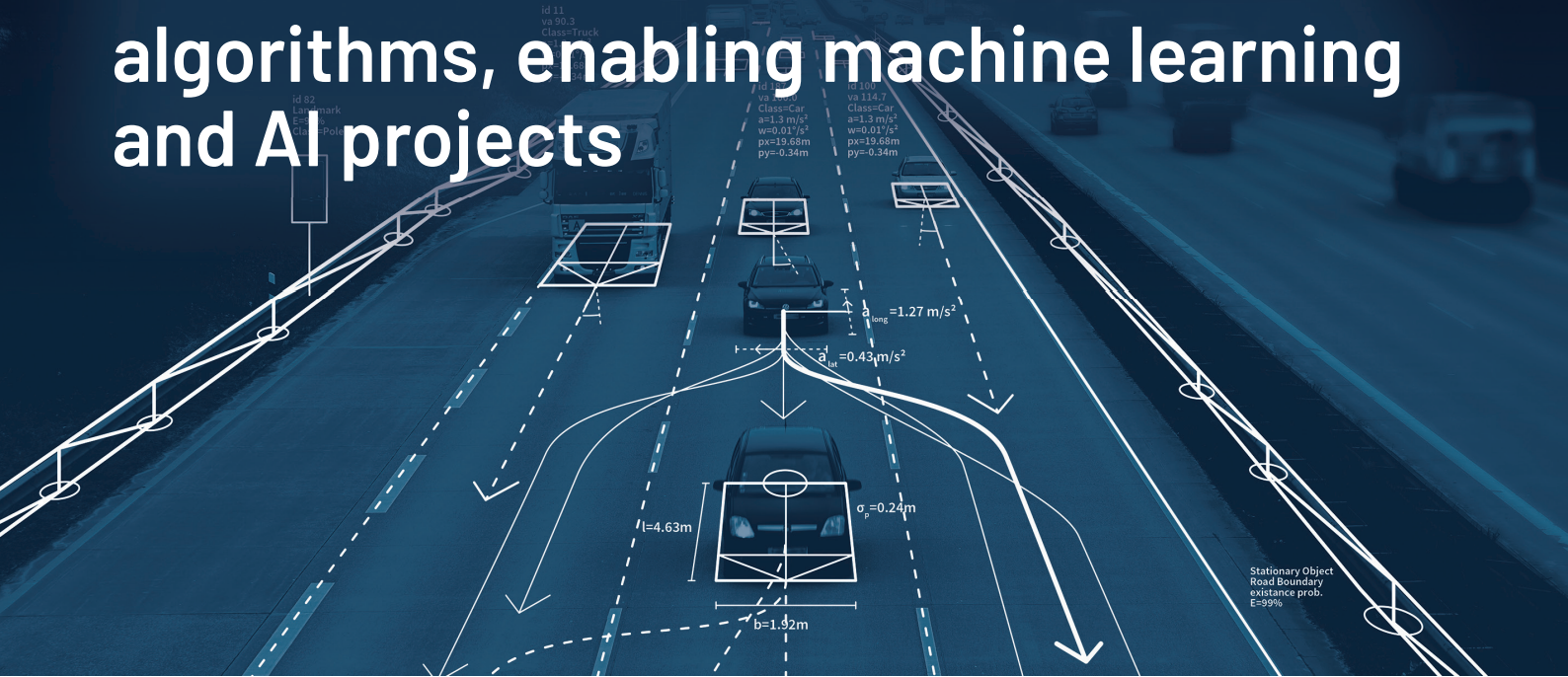


MOSAIK Suite™

Automated validation of sensors and algorithms, enabling machine learning and AI projects



Key Features

- Offers the complete toolchain from a single source
- Includes MVIS Auto-Annotation software
- Automatically annotates objects and lanes
- Scalable due to cloud-compatible architecture
- Supports data of selected third-party lidars
- Allows for manual editing of objects and lanes
- Compatible with MVIS SyncBox Pro

Toolchain

STEP 1 Real-time Tracking and Recording	STEP 2 Recorded Data Validation	
0 % raw data 100 % raw data 	0 % GT** data 100 % GT data 	
Recording System	MVIS Validation	
Hardware ► Lidar ► Lane tracker SLMS ► Third-party lidar sensors* ► MVIS ECU ► MVIS SyncBox Pro ► IMU / GPS Software ► MVIS ECU Recording Suite ► MVIS CaliGraph	MVIS Auto-Annotation Software ► Automatic object detection, classification & tracking ► Automatic lane marking and road boundary detection (highway) ► Automatic scenario detection ► Cloud-compatible architecture due to Docker image ► Intuitive graphical user interface ► Data formats: • For objects .json • For lanes OpenDRIVE xODR	MVIS Reference Software ► Visualization for scan point, object, and lane data ► Editors for object, lane and scenario data ► Interface software development kit (SDK)

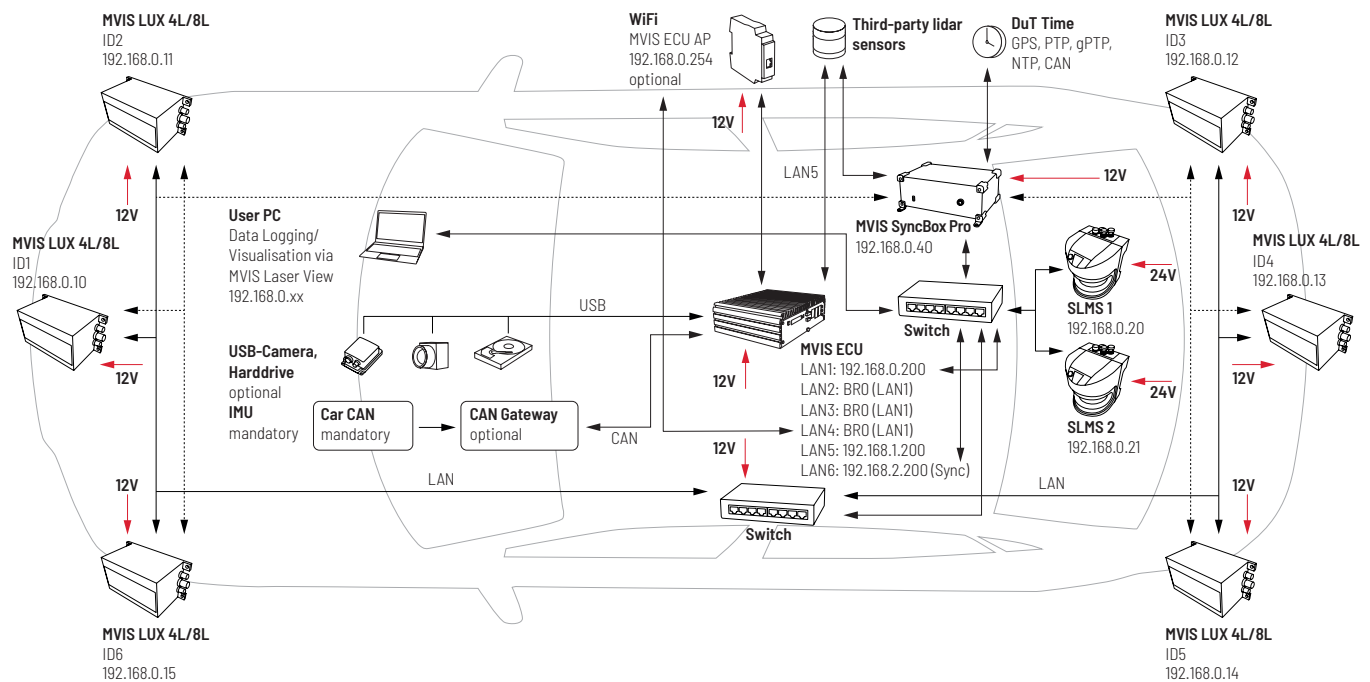
*Selected third-party hardware not in MVIS product portfolio; real-time object data not available

**GT = Ground Truth

Safe mobility at the speed of life



System Architecture



MOSAIK Suite™: Our Difference



Third-Party Lidar Data Support

- ▶ MOSAIK Suite™ supports selected lidar devices from other suppliers
- ▶ Offers increased flexibility through support of third-party lidar devices (e.g., 360° lidar on the rooftop)
- ▶ Enables simultaneous operation of different devices to accommodate any use case



Object and Lane Editing

- ▶ Quick and intuitive tools to increase object and lane quality of the reference data manually
- ▶ Enables modification of objects and lanes, such as position, orientation, and classification
- ▶ Applies changes to the entire object track instead of frame-by-frame editing



MVIS SyncBox Pro

- ▶ Time management device that synchronizes all systems in the car to a single source of truth
- ▶ Able to function as leader clock or follower clock for each connected component or protocol
- ▶ Ensures data time quality of all systems in the car
- ▶ Supports all common time protocols (such as PPS & NMEA, gPTP/PTP, NTP, CAN) and can be configured to the use case accordingly
- ▶ Monitors synchronization status for various interfaces