IMAGRY

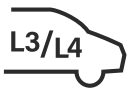
MAPLESS AUTONOMOUS DRIVING

OVERVIEW

Imagry is an Autonomous Vehicle software provider that has created a mapless driving system. Our bio-inspired technology is based on years of research and development in the field of neural networks. It combines a real-time vision-based perception network and an imitation-learning Artificial Intelligence (AI) deep learning network for autonomous driving decision-making.

Our software enables the vehicle to understand the surrounding environment as it drives, and react to dynamic context and environments, just like a human driver. Imagry delivers L3/L4 autonomy with built-in adjustability to new roads and adaptability to situations as they happen.

KEY SOLUTION BENEFITS



Self-Driving Ready

Mapless Driving

Deep Neural Networks

HW-Agnostic

Self-Sufficient

Location Independent

Fits Many Self-Driving Applications

SOFTWARE STACK

PUSHING THE LIMITS OF AI AND COMPUTER-VISION

PERCEPTION

A real-time image recognition system that uses a video feed to produce a reliable top-down view of the environment around the vehicle.

- Scans 360˚ using VIS (visible imaging sensor) cameras
- Projects to a range of 200 meters
- Detects and perceives road geometry and markings, traffic signals and traffic signs, and extrapolates to trajectories and velocities
- Delivers input of surroundings and situational awareness for motion-planning

MOTION PLANNING

A spatial DCNN (deep convolutional neural network) that learns how to drive by imitating human driving behavior.

- Able to respond to new and unforeseen situations
- Makes data-driven complex decisions relying on what it perceives in real-time
- Does not require a large investment in rule-based code writing and verification

FLEXIBLE SOLUTIONS FOR DIFFERENT VEHICLE TYPES

Imagry solutions can be installed on passenger vehicles as well as buses.

L3/L4 PASSENGER VEHICLES

AUTONOMOUS SHUTTLES/ BUSES

SOLUTION HIGHLIGHTS

1 DISRUPTIVE

Patented technology, ready for L3/L4 autonomous driving use-cases. Bio-inspired system based on Neural Networks for real-time perception and decision making.

2 SELF-SUFFICIENT

Supervised learning method continuously increases the system capabilities and performance without necessitating high bandwidth communication for external HD mapping.

3 LOCATION INDEPENDENT

Rollout is scalable to new locations, worldwide, based on fast, small scale environment adaptation.

4 MULTIPURPOSE

Serves a variety of self-driving applications (cars, buses, shuttles, off-road, logistics) using lean and efficient engineering and light hardware requirements.

5 HIGHLY DIFFERENTIATED

Mapless driving, avoiding expensive and complex mapping, localization and communication issues. Cameras-only perception layer eliminates the need for LiDAR (Light Detection And Ranging), RADAR (Radio Detection And Ranging), and multi-sensor fusion technologies. These other perception technologies can be integrated, if desired.

COMPANY PROFILE

FOUNDED	TEAM	OFFICES	PATENTS	FUNDING TO DATE
2015	~80 MEMBERS, ~75 R&D	HAIFA | ISRAEL SAN JOSE | CALIFORNIA	4 GRANTED 2 PENDING	$31M

USE-CASES

1. L3/L4 AUTONOMOUS DRIVING IN PRIVATE VEHICLES ON PUBLIC ROADS
2. AUTONOMOUS SHUTTLES & BUSES
3. OFF-ROAD APPLICATIONS (unstructured data)

MANAGEMENT TEAM

ERAN OFIR
CEO

DANNY KLEIN
CFO

DR. ILAN SHAVIV
CTO

MAJED JUBEH
CO-FOUNDER & CDO

LIOR MARGALIT
VP R&D

NEXT STOP: FULL AUTONOMY. ARE YOU COMING?