



EMIIA.AI

THE FIRST AI APPLICATION
FOR PATTERN RECOGNITION
VIA RADIO WAVES

The technologies currently used do not allow robotic systems with AI to achieve the proper level of security, which leads not only to losses, but also to casualties among people. If our decisions save at least one human life, we will consider our mission accomplished.

The first person killed by an UBER unmanned vehicle was Elaine Herzberg. In connection with this incident, UBER stopped testing self-driving car, the investigation lasted 1.5 years. Which led the company to financial and competitive losses.

The development of EMIIA (EMIIA.AI) significantly reduces the likelihood of harm to humans as a result of interaction with intelligent machines and systems. They reduce costs and increase the capabilities of artificial intelligence, allowing you to achieve 4 "mind off" and 5 "steering wheel optional" levels of autonomy.

- Required Investments (round): \$150 000
- The total amount of investment required to complete the development and launch the project on the market: \$3 000 000
- Return on investment: 2023-2025 rr
- Stage: MVP, integration testing
- Objectives (round): patenting, software licensing, pilot projects, completion of development and preparation of solutions for entering the market (2021-2022)
- Markets: Asia-Pacific, EU, BRICS (B2B/B2C)
- Market capacity: more than \$3 billion (SOM 40-70%) CAGR 10%, the technology will have an impact on the global IoT/IIoT market with a capacity of more than \$300 billion.
- Profitability: 2024-2025, project capitalization of more than \$1 billion.
- *Planned number of active users: more than 500 million by 2025
- Scaling: application stores (B2C), software pre-installation in manufactured devices and machines (B2B), online/offline solution integrators (B2B)
- *Business model: Edge Computing/SaaS

Pattern recognition, detection, calculation of speed, coordinates and direction of movement of objects (people, animals, cars) by means of radio waves, including behind radio-transparent obstacles (walls, obstacles, rain, snow, fog, dark time of day).
Neural network signal processing and data visualization (Edge).

Range: through radio-transparent obstacles up to 9 meters, in open area up to 300 meters, passive detection up to 1000 meters. More than 30% of sensors, navigation, ADAS, automation and security tools are replaced by software.
CR-SLAM (a method of simultaneous localization and mapping).

Basic technology and applications:

Cognitive Radio optics - machine vision based on the principles of radio optics using artificial neural networks.

CR-SLAM (Cognitive Radio optics sensor, simultaneous localization and mapping):

- AI Navigation
- AI Mapping
- AI Sensor

Scopes of application:

- Auto industry
- Robotics
- Automation
- IoT/IIoT
- Smart Home

Requirements:

- EMIIA Software
- Linux or Android OS
- Wi-Fi 2.4/5 GHz module

AI algorithms, neural network models (datasets), terms and format of the "Cognitive Radio optics" technology are developed exclusively by EMIIA.