



Technologies transforming cities

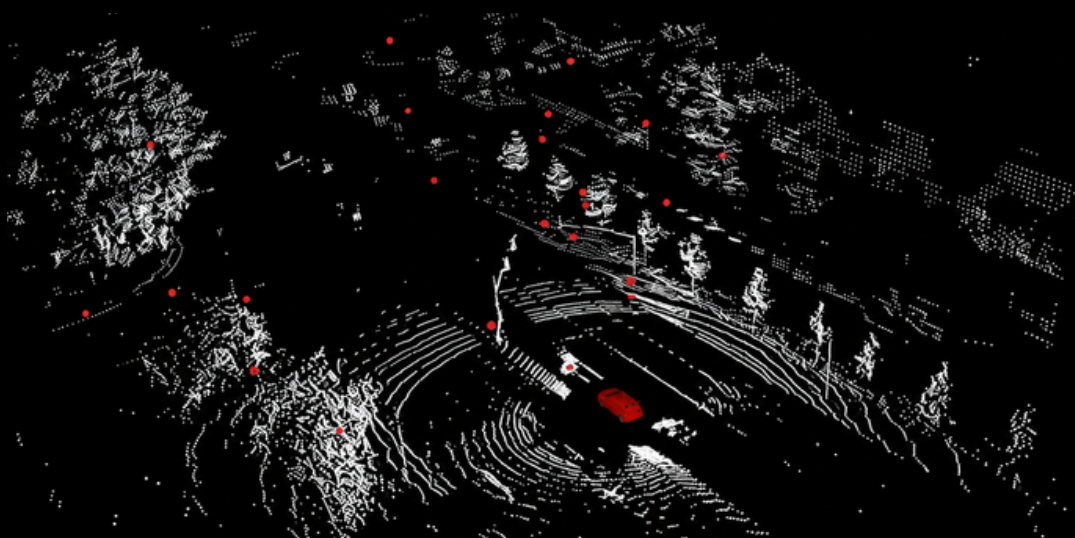
Lukasiewicz - Automotive Industry Institute

Supports development of smart cities through research, development, and implementation of cutting-edge technologies for transport, infrastructure, and mobility management. We combine expertise in artificial intelligence, robotics, digital twins, automation, and electromobility to help create a safe, efficient, and sustainable urban environment.

We offer:

- R&D projects
- Prototyping and technology demonstrators
- Research and testing of new solutions
- Analyses and simulations
- Support for local governments, transport operators and businesses

**Research, testing
and implementation**



Visualisation of data collected from the research platform



pimot.lukasiewicz.gov.pl/en/

Our Technologies for Smart Cities

Artificial Intelligence

- Analysis of urban images and data
- Intelligent monitoring systems
- Detection of incidents and threats
- Optimisation of transport and logistics processes

Digital Twin

- Digital twins of infrastructure and transport systems
- Traffic simulations and urban development scenarios
- Support for investment decisions and urban planning

Electromobility

- Electric and hybrid vehicles
- Next-generation drive systems
- Energy storage
- Vehicle energy-efficiency assessment

Robotics and Automation

- Mobile robots
- Autonomous transport platforms
- Navigation and perception systems
- Solutions for urban logistics and industry

Intelligent Mobility

- Autonomous vehicles
- Advanced Driver Assistance Systems (ADAS)
- Testing of new transport technologies
- V2X solutions



Real-world road image

Simulation representation