AI matters

SMAUT

CZECH INSTITUTE OF INFORMATICS ROBOTICS AND CYBERNETICS CTU IN PRAGUE

Realistic AI solutions for mobile robotic systems

AI-MATTERS/TEF cooperation with Czech technology company SMAUT Technology

Ecosystem for industrial digitization at CIIRC CTU

CZECH INSTITUTE OF INFORMATICS ROBOTICS AND CYBERNETICS CTU IN PRAGUE

Services focused on innovation with AI in industry

AI matters

RICAIP TESTBED PRAGUE

Infrastructure, research, and development for innovation in industry

Services focused on digitizing the public sector and small enterprises

EDIH CTU

NATIONAL CENTRE FOR INDUSTRY 4.0

Connecting academia and industrial companies

Services and technologies of Czech testbeds

matters

85-100% discount

RICAIP TESTBED PRAGUE

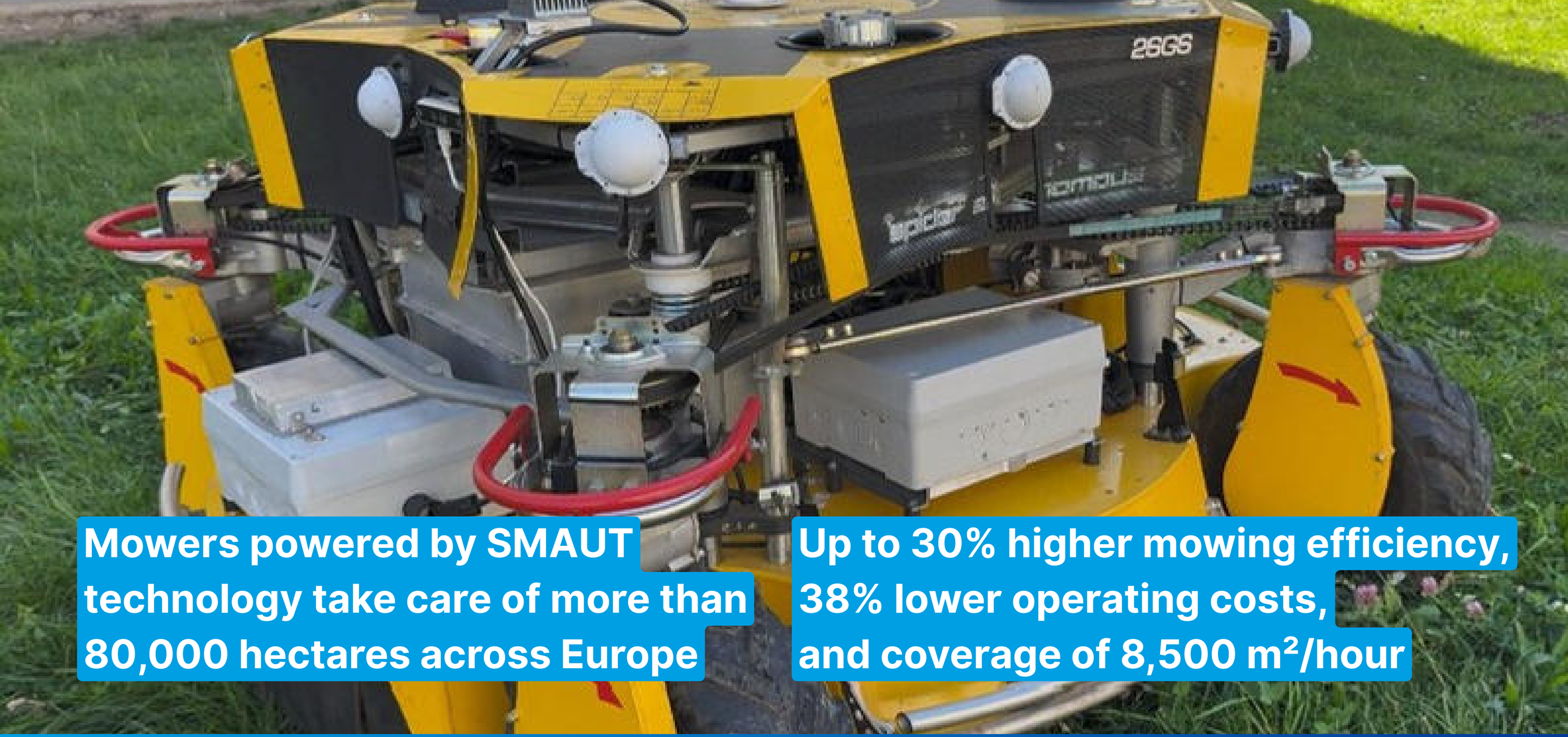
PRAHA

RICAIP TESTBED BRNO

BRNO

VŠB TECHNICKÁ UNIVERZITA OSTRAVA

OSTRAVA



Mowers powered by SMAUT technology take care of more than 80,000 hectares across Europe

Up to 30% higher mowing efficiency, 38% lower operating costs, and coverage of 8,500 m²/hour

SMAUT

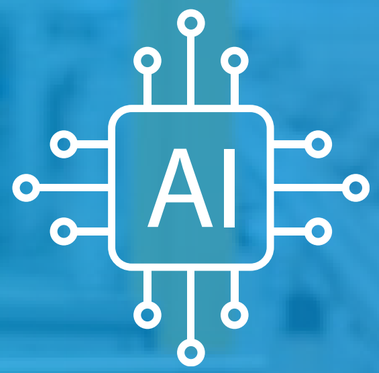
Leader in autonomous mowing technology specializing in green space and terrain maintenance

Challenges

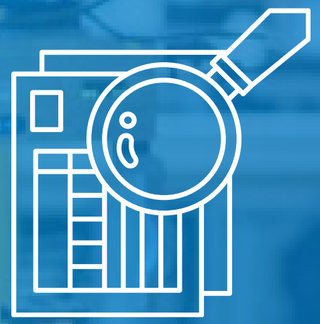
- Mowing in tall grass
- Avoiding obstacles hidden in the grass
- Autonomous navigation even outside GPS signal range
- Coordination of multiple machines on a single plot of land
- Durability and protection against misuse

What are the services provided by AI-MATTERS/TEF?

Prototyping, testing, verification, and validation of systems with AI elements



Prototyping and testing of artificial intelligence systems

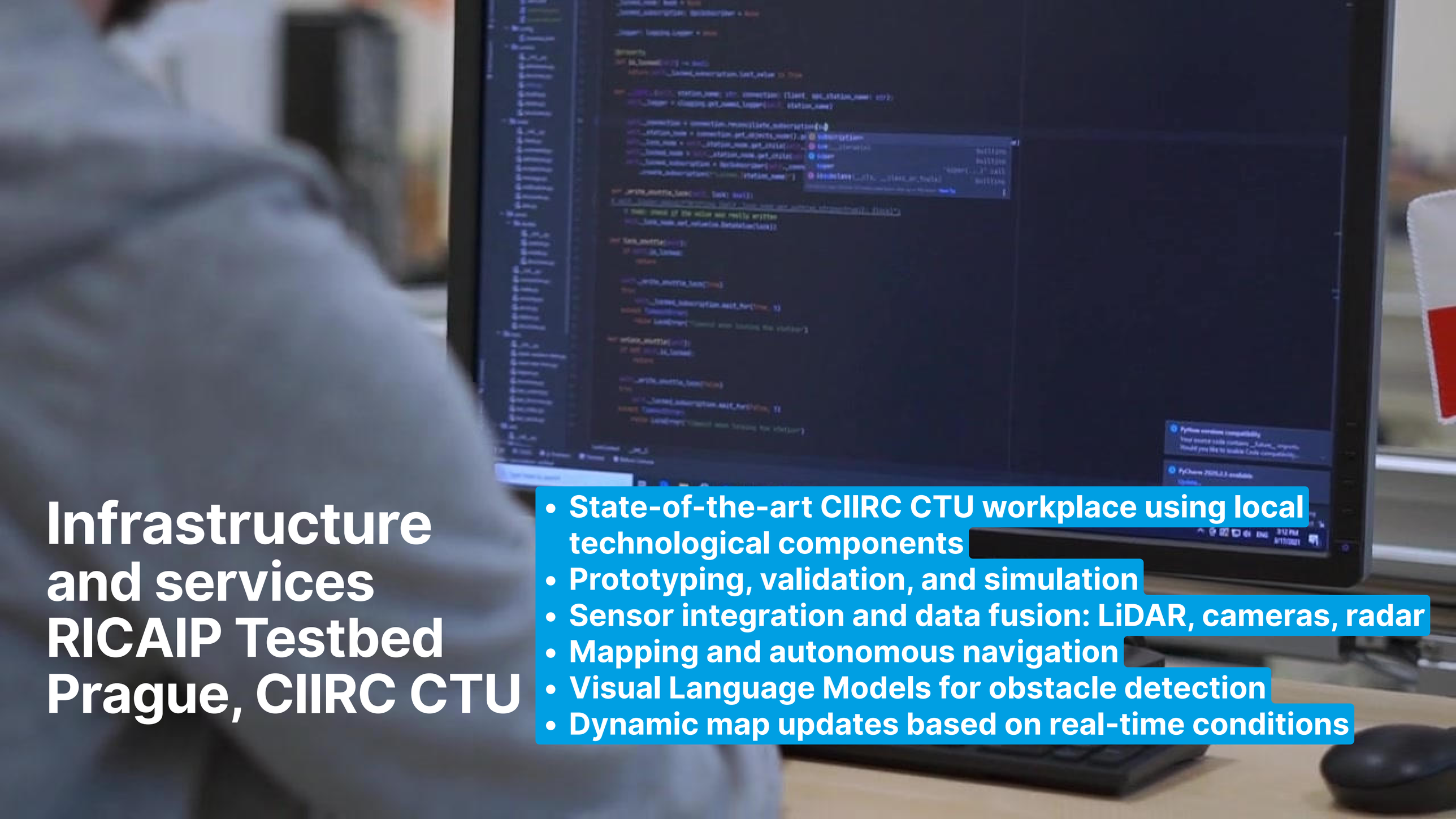


Testing in real-world environments

Automatic route planning and behavior optimization

Dynamic real-time map generation

Robust protection against cyber attacks



Infrastructure and services RICAIP Testbed Prague, CIIRC CTU

- State-of-the-art CIIRC CTU workplace using local technological components
- Prototyping, validation, and simulation
- Sensor integration and data fusion: LiDAR, cameras, radar
- Mapping and autonomous navigation
- Visual Language Models for obstacle detection
- Dynamic map updates based on real-time conditions

Benefits of cooperation

- Fully autonomous operation
- Safer operation and higher reliability
- Minimization of operator intervention
- Better utilization of the machine fleet
- Faster implementation of innovations

Verified prototypes and algorithm validation

Ready for wider practical application

Proven resilience against cyber threats

Outcomes

“From testing to real-world deployment”

AI matters

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cz.ai-matters.eu

smaut.tech

ciirc.cvut.cz

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CZECH RECOVERY PLAN

AI matters

CZECH INSTITUTE OF INFORMATICS ROBOTICS AND CYBERNETICS CTU IN PRAGUE

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