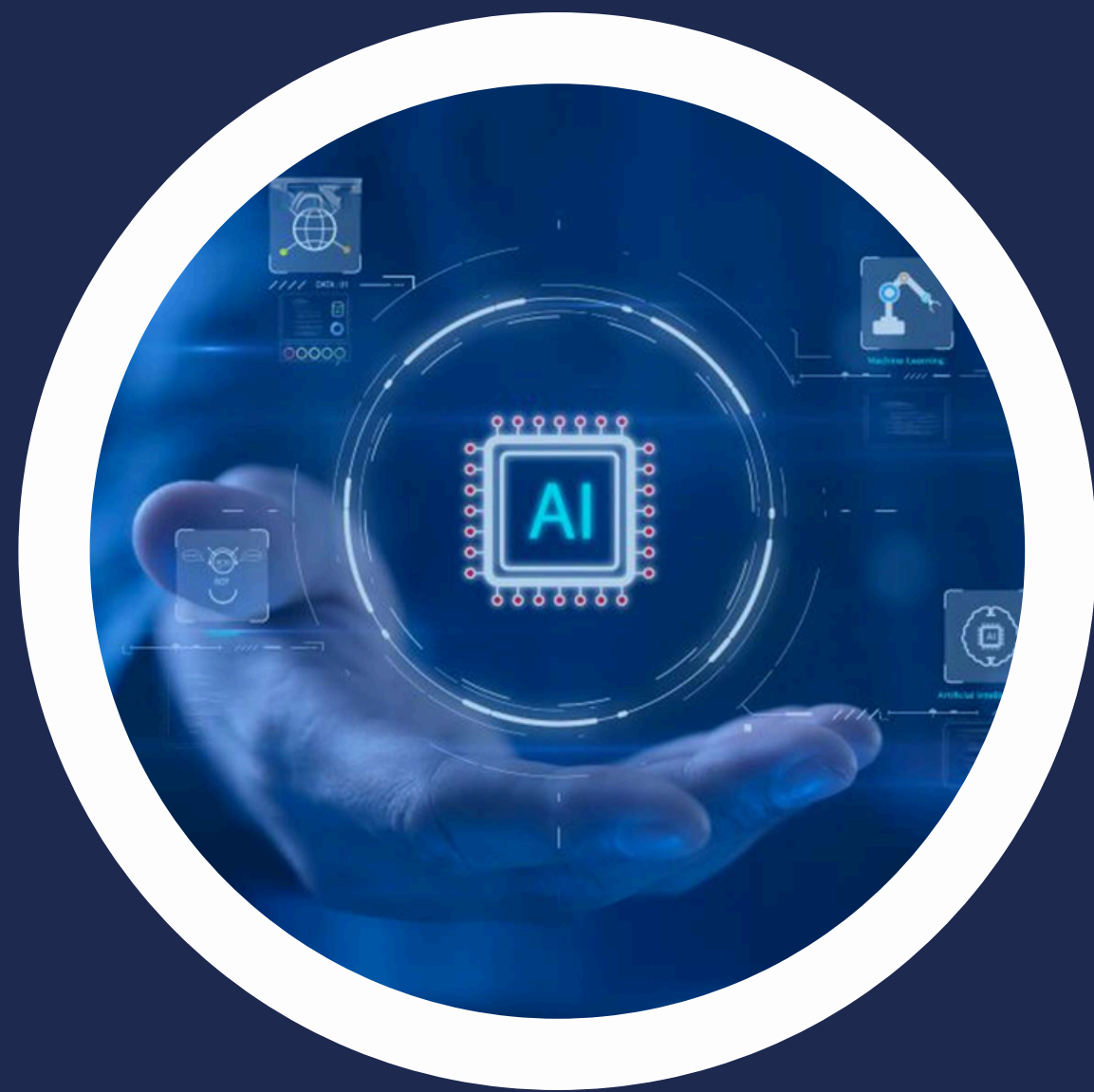


ARTIFICIAL INTELLIGENCE, DATA ANALYTICS AND DIGITAL TRANSFORMATION

This competency integrates applied artificial intelligence and digital transformation to help partners design and adopt data-driven solutions. It covers the full innovation cycle from machine learning and predictive analytics to enterprise AI integration and organisational readiness. The expertise supports both technical RDI activities and strategic transformation, enabling scalable and impactful AI deployment.



ACHIEVEMENTS

- Collaboration with industrial partners including Bosch, Arconic Zrt., and MATE on AI-driven innovation
- Development of AI-based algorithms for precision agriculture and predictive maintenance
- Intelligent video and sensor data processing solutions for surveillance and quality validation
- Contribution to national digital transformation initiatives including the Digital Success Programme



INFRASTRUCTURE

- AI and data analytics laboratories with MATLAB, Python, and R environments
- Computational clusters and GPU workstations for deep learning and simulation
- Data visualisation and business intelligence tools such as Power BI and Tableau
- Test and validation systems connected to sensor networks and industrial datasets
- Software toolchains for machine learning model training, deployment, and evaluation



REFERENCES

- Intelligent algorithm development for dairy cattle rumen sensor systems with MATE and Albacomp Zrt. under grant 2020-1.1.2-PIACI-KFI-2020-00109
- Predictive maintenance algorithm development in collaboration with Arconic Zrt.