CIIRC CTU AS THE ENabler OF THE AI INDUSTRIAL ECOSYSTEM & ACADEMIA-INDUSTRY COOPERATION

Focus
CIIRC CTU is a Centre of Excellence of independent research, technology development, services for SMEs & large companies in fields of Industry 4.0.
- Cyber-Physical Systems,
- Artificial Intelligence,
- Industrial Robotics,
- Production Systems.

210 FTE Researchers
152 FTE
€ 15.5M Turnover

Infrastructure
Testbed for Industry 4.0
is a research and experimental manufacturing facility for testing and experimentation of the latest AI-based technologies for advanced and fully integrated industrial production and processes for smart factories.
- Open access infrastructure.
- Flexible interconnection of universal production tools.
- Multi-agent platform for distributed manufacturing systems.
- Virtually connected with testbeds in CZ and Germany - RICAIP Centre.
- One of the very first 5G-based industrial testbeds in CEE.

Experience
- RICAIP Centre – European CoE in the area of AI, industrial robotics, and flexible manufacturing.
- National Competence Centre “Cybernetics and AI“.

RICAIP - Research an Innovation Centre on Advanced Industrial Production (www.ricaip.eu):
- EU Horizon2020 Teaming Phase II
- ESIF OP RDE Project

€ 49M Total Funding EU + National 2019 - 2026
€ 15M Technologies & Investments for the Testbed

Ecosystems
National Centre for Industry 4.0
Czech platform of ~ 50 members:
- Technology developers;
- End users: large corporates, SMEs;
- Public bodies and associations.

Joint labs and projects with technology developers and providers (large companies, start-ups and SMEs): Siemens, VW, Škoda Auto, Eaton, Rockwell Automation, Lego, Pocket Virtuality, Factorio Solutions & more.

Long-term strategic partnerships: DFKI, Inria, LMS Patras, CEA, Vicomtech, ZeMA and many more.

Networks
CIIRC CTU is also
- ELLIS Unit Prague
- CLAIRE Office Prague
- EIT Manufacturing Hub
- IDSA Office
- Member of AI DIH Network

Use case
CIIRC RP95-3D Protective Half-Mask
- Fast prototyping of the protective device at the start of COVID-19 pandemic in 03/2020.
- R&D ready in one week incl. CE Certification.
- Demonstrator of the multi-site production concept in collaboration with industry.
- 3D printing data was shared worldwide.
- 100 downloads in 30 countries.
- Complete innovation process from idea to tech transfer.

TEF in the Czech Republic for the Manufacturing Sector