



SMART SPECIALISATION
COOPERATION IN CENTRAL EUROPE



HUROCCA

HUman RObot Collaboration in Computer aided process planning for Assembly

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- MTA SZTAKI is the Institute for Computer Science and Control of the Hungarian Academy of Sciences: interdisciplinary setting in the fields of computer science, engineering, information technology, intelligent systems, process control, networking and multimedia
- MTA SZTAKI is an academic institution
- It operates in Hungary
- EMI Lab:
 - **modelling, prediction, control and optimization of technical and business processes**
 - modelling and robust control of virtual enterprises and production networks
 - simulation of large technical and business systems, digital factories
 - **technological process planning**
 - **production planning and scheduling**
 - **advanced robotics and mechanisms**
 - sustainable, smart energy systems
- Previous related project: *VisionAIR, RLWNavigator, SYMBIO-TIC*

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- CAPP based approach for efficient Human-Robot Collaboration (HRC) in Assembly
- Key HW/SW enablers for HRC are already available, but their utilization crucially depends on efficient process planning. Leveraging HRC's advantages of flexibility and parallel process execution demands a proper formalized characterization of the problem, with models and efficient methods to solve it. Driven by strong and real-life industrial use-cases, the project is aimed for increasing competitiveness and productivity of assembly production companies.
- No consortium currently. Profile of the partners sought:

Type	Skills	Role
System integrator	Experience in installing robotics/HRC related solutions on industrial sites	Project manager, implementation
Research institute/university	CAPP and robotics related research background	Research and knowledge provider
Industrial company with HRC-Assembly use-cases	Robot	Use-case provider

Thank you!

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