AI-PROFICIENT. Artificial Intelligence for improved PROduction efFICIEncy, quality and maintenance

Consorcio: Universite De Lorraine (Fr); Continental France Snc (Fr); Tekniker (Es); Ineos Services Belgium (Be); Tenforce Bvba (Be); Teknologian Tutkimuskeskus Vtt Oy (Fi); Inos Hellas Protoporiakes Efarmoges Pliroforikis Automatismou Kai Robotikis Anonymi Emporiki Etaireia (El); Ibermatica (Es); Institut Mihajlo Pupin (Rs); Athens Technology Center Anonymi Biomichaniki Emporiki Kai Techniki Etaireia Efarmogon Ypsilis Technologias (El);

Tecnología: Inteligencia Artificial

Descripción general:

The AI-PROFICIENT project will pave the way for integration of advanced AI technologies to manufacturing domain through an evolution from hierarchical and reactive decision making to self-learning and proactive control strategies. The proposed approach is underpinned by predictive and prescriptive AI analytics at both component and system level, by cross-fertilizing edge and latform AI, while leveraging the human knowledge and feedback for reinforcement learning (human-in-the-loop).

Ibermatica will bring the expertise in integration with ERP/MES systems (such as Olanet 4.0 and RPS), and they will assume the leading role of WP6 which is responsible for project validation. IBE will contribute in the characterization of the pilots, as well as in the technological architecture design that will provide the foundation for the developments to be carried out in the project (WP1). IBE will also work in the detection of anomalies during the production process, automatic modelling of the production process through machine learning and process mining tools, as well as detection of complex and diffuse events that occur in the production process (WP2 and WP3). In addition to this, IBE will work both on the semantic explanation of ML models and on the generation of interaction interfaces through the use of visualization by means of augmented reality, visual analytics and conversational interfaces (WP4). IBE will lead the WP6 work package taking a leading role in the different tasks of this work package, while making available to the rest of the consortium its experience in the deployment of advanced analytical solutions in Industry 4.0 environments (WP6).

Programa: H2020-ICT-2020-1 (957391)

Duración: 36 meses (2020-2023)

Presupuesto global proyecto: 5.467.698,75€

Presupuesto Grupo Ayesa: 453.687,50€