Digital technologies in cognitive production plants:
Six SPIRE projects present their innovative approaches

Stefano Ellero
(STAM)

Pedro Maria De la Peña Tejada
(Ibermatica)

Cristina Vega Martinez
(Cartif)

Anibal Reñones
(Cartif)

Nenad Stojanovic
(Nissatech)

Vito Logar
(University of Ljubljana)

Beatriz Chicote
(Lortek)

Stavros Lounis
(Eltrun)

Silvia Razzetti
(POLIMI)

Stefano Ellero
(Stam)

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Mr Stefano Ellero has a Mechanical Engineering background. He is currently managing the Robotics and Mechatronics Business Area at Stam. He is a well experienced Project Manager with expertise in design, engineering, prototyping, industrialization and testing of mechanical devices, mechatronic systems and production processes. He has strongly contributed to several developments of Stam in applications such as: manufacturing, robotics, automotive, aerospace, construction and bio-engineering.

Pedro Maria De la Peña Tejada
(Ibermatica)

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Pedro holds a degree in Computer Engineering from the University of Deusto 1998, a Master in Systems Integration from the University of Deusto in 2001 and a Master in Visual Analytics and Big Data from UNIR 2022. He is also PMP certified.
In his more than 20 years of experience, he has worked mainly in the R&D area where since 2005 he is Technical Head of R&D Programmes of the Ibermatica group, identifying the R&D areas in which to develop strategic projects. He has also participated and led multiple national and European projects.
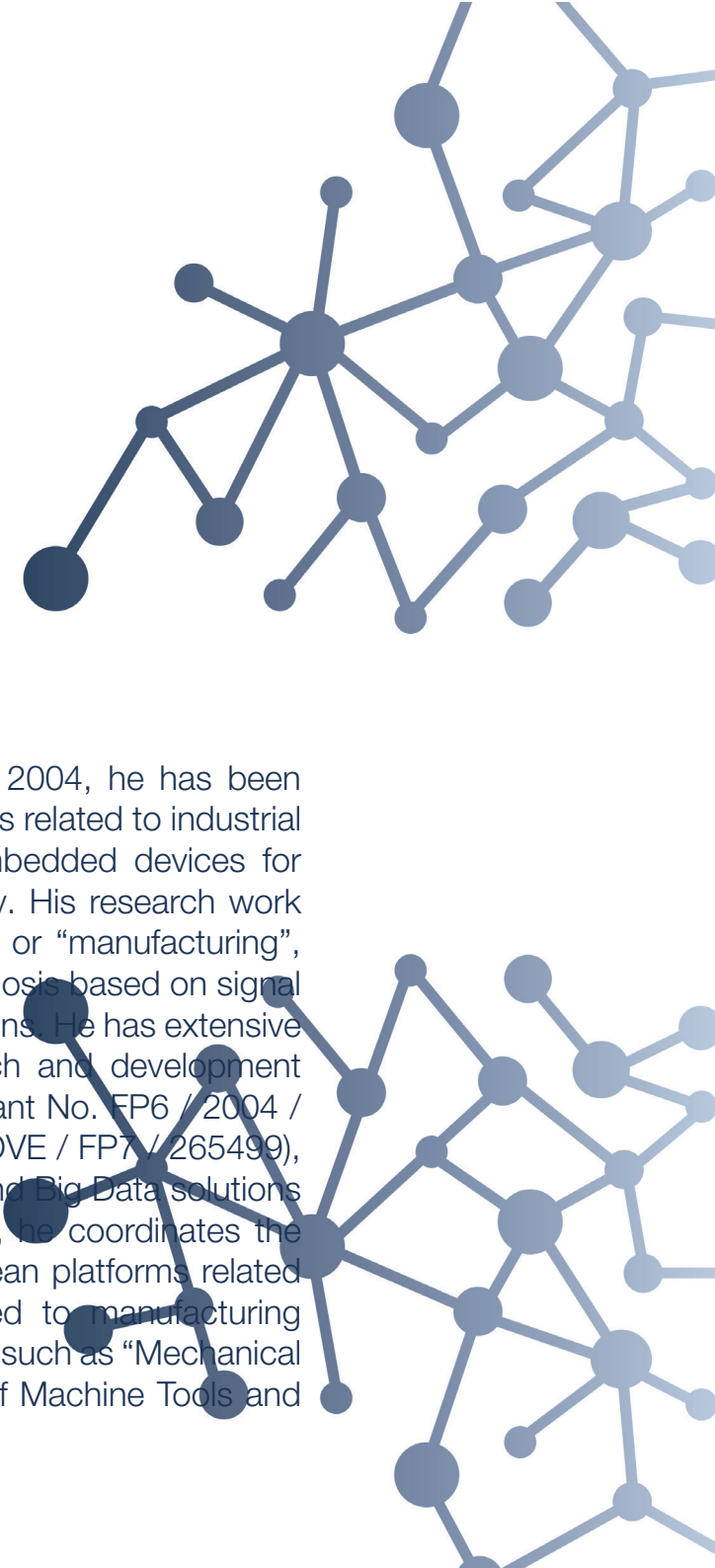
Cristina Vega Martinez
(Cartif)

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Cristina Vega Martínez is an industrial engineer (mechanical specialty of industrial constructions, 2014) from the University of Valladolid. Her previous field of work has been as Project Manager in the automotive industry for more than 5 years and she is currently working as researcher and Project Manager in European projects within the Industrial and Digital Systems division.

Anibal Reñones
(Cartif)

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Anibal Reñones Industrial Engineer, received his doctorate degree in 2004, he has been actively working for 25 years at CARTIF developing R&D tasks in projects related to industrial diagnostics, predictive maintenance and development of custom embedded devices for different fields such as freight transport or energy efficiency in industry. His research work covers areas such as fault diagnosis for wind turbines, transportation or "manufacturing", the development of embedded systems for monitoring, automatic diagnosis based on signal analysis, as well as the design and implementation of Industry 4.0 solutions. He has extensive experience of more than 10 years in collaborative European research and development projects on different topics such as industrial communications (VAN grant No. FP6 / 2004 / IST / NMP / 2 - 016696), electric mobility (Green eMotion grant No. MOVE / FP7 / 265499), energy efficiency in industry (REEMAIN grant No. 608977) and / or AI and Big Data solutions applied in the process industry (CAPRI, grant No. 870062). Currently, he coordinates the CARTIF Industry 4.0 working group and actively participates in European platforms related to manufacturing (EFFRA, SPIRE2030) and Big Data (BDVA) applied to manufacturing environments. He has published different articles of impact in magazines such as "Mechanical Systems and Signal Processing", "Sensors" or "International Journal of Machine Tools and Manufacture".

Nenad Stojanovic
(Nissatech)

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Nenad Stojanovic, CEO Nissatech, a research-performing SME from Serbia.
He holds a PhD related to Ontology Engineering from the KIT, Germany, where he spent 15 years as researcher
Main research interests: innovative industrial systems based on advanced technologies like Data Analytics, AI and Ontologies. Currently, his research focuses on the role of the human-like cognition in resolving complex industrial problems. The main goal is to mimic in AI-based industrial systems how human react when precepting and understanding unknown and unusual situations. He is active in BDVA, esp. in the domain of data analytics.

Vito Logar
(University of Ljubljana)

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Vito Logar is an Assistant Professor at the Faculty of electrical engineering, University of Ljubljana, as a member of Laboratory of Control Systems and Cybernetics. His professional career relates to the research and development in the field of electric arc furnace (EAF) steelmaking, focusing on process modelling and optimization in terms of resource use.

Beatriz Chicote
(Lortek)

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Beatriz Chicote Gutiérrez, PhD in Electronics and Telecommunications from the University of the Basque Country (2019). Previously she has done the Industrial Electronics engineering (2013) and the Master in Advanced Electronic Systems (2015). Currently, she works as Senior Researcher in the Digitalization Technology area at Lortek, working on the development of monitoring systems for additive manufacturing processes and on signal processing and characterization.

She has more than 8 years of research experience in which she has worked in monitoring systems development and signal processing. During her experience, she has participated in several regional, national and European research projects for the development of R&D concepts and R&D solutions in different environments. Finally, in her research career, she has published one book chapter, 6 journal articles and 30 conference papers.

Stavros Lounis
(Eltrun)

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Dr. Stavros Lounis is a Senior Researcher at the ELTRUN E-Business Research Center of Athens University of Economics and Business (AUEB). He holds a PhD in Management Science and Technology from AUEB, a MSc in Information and Communication Technology (ICT) Systems from the School of Science and Technology of the International Hellenic University and a B.Sc. in Applied Informatics in Management and Finance from the Faculty of Management and Economics of the Technological Institute of Messolonghi. His research interests focus on Gamification of Electronic Services, Industry 4.0 and Digital Twins and Innovation and Entrepreneurship and his work has been presented in peer-reviewed academic conferences and journals.

Silvia Razzetti
(POLIMI)

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Silvia Razzetti (female) is a graduate research fellow in the Manufacturing Group of Politecnico di Milano, currently working in the context of European projects related to digital transformation for manufacturing (Artificial Intelligence, Digital Twin, Twin Transformation). As part of the Politecnico group, she is collaborating in project management and coordination and in research activities related to maturity models and impact assessments. Main projects to be mentioned: BOOST4.0, AI REGIO, CAPRI, DIH4AI, XMANAI, AI.SOV.

Previously, she worked for 3 years in a consulting company, technological branch, strongly enhancing expertise in big data, data monetization, database management and programming.

In 2017, she graduated at Università degli Studi di Milano in Mathematics (bachelor degree focused on optimisation and master degree focused on statistics).