iDEV4.0. Integrated Development 4.0

Consorcio: Infineon Technologies Austria, Avl List Gmbh, Know-Center; Research Center For Data-Driven Business & Big Data Analytics, Ait Austrian Institute of Technology, Kai Kompetenzzentrum Automobil - Und Industrieelektronik, Tttech Computertechnik, Cisc Semiconductor, Evolaris Next Level Gmbh, Kompetenzzentrum - Das Virtuelle Fahrzeug, Forschungsgesellschaft Mbh, Technische Universitaet Wien, Infineon Technologies It-Services Gmbh, Universitaet Klagenfurt, Infineon Technologies, Infineon Technologies Dresden, Fraunhofer Gesellschaft Zur Foerderung der Angewandten Forschung E.V., Systema Systementwicklung Dipl Inf.Manfred Austen, Siemens Aktiengesellschaft, Ostbayerische Technische Hochschule Regensburg., Echnische Universitaet Dresden, Fernuniversitaet In Hagen, Elmos Semiconductor, Camline Datensysteme, Eccenca, Westsachsische Hochschule Zwickau, Irris Het Collectief Centrum Van de Technologische Industrie, Infineon Technologies Italia, Universita' Degli Studi Di Milano-Bicocca, Fundacion Tecnalia Research & Innovation, Jema Energy, Akting Ingeniaritza, Ibermatica, Infineon Technologies Romania And Co. Societate In Comandita Simpla, Universitatea Politehnica din Bucuresti, Universitatea Tehnica Cluj-Napoca

Tecnología: Industria & Consumo; Inteligencia Artificial, Ciberseguridad

Descripción general:

The European electronic components and systems industry is constantly moving motivated by a knowledge driven global challenge, dealing with exceptionally complex systems but also complex components, manufacturing processes and life cycles

The main objective of iDev40 is to enable a big step forward in the European ECS industry by digitalisation of development processes. This is of huge importance for fostering both, development and production, as these are inseparable combined in the electronics industry.

The new concept of introducing seamlessly integrated development together with automation and network solutions as well as enhancing the transparency of data, their consistence, flexibility and overall efficiency will lead to a significant reduction in the time to market (T2M) race. Ultimately, the project aims at a flawless integration of three elements which embody the essence of the Industry 4.0 (I4.0) / Industrial Internet:

- Intelligent Machines and integrated development: Connect the world's machines, facilities, fleets and networks by advanced sensors, controls and software applications
- Advanced Analytics and fast learning: Combines the power of physics based analytics, predictive data driven algorithms, automation and the "deep learning" domain also enabling advanced data protection schemes.
- People Excellence: Connecting people at work or on the move, any time to support more intelligent research and development, operations, maintenance and higher service quality and safety

Programa: H2020-ECSEL-2017-1-IA (783163)

Duración: 36 meses (2018-2021)

Presupuesto global proyecto: 47.069.170 €

Presupuesto Grupo Ayesa: 872 000,00 €

Este proyecto ha sido objeto de ayuda con cargo al programa H2020-ECSEL-2017-1-IA-two-stage

European Commission

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Rol of Ayesa:

Ibermática plays a key role in the project by contributing to data management, artificial intelligence, and cybersecurity within Industry 4.0 environments.

It focuses on managing complex, distributed industrial data, ensuring its quality, consistency, and traceability across the product lifecycle. It also supports the definition and validation of secure data management and cybersecurity concepts.

In addition, Ibermática contributes to knowledge management by structuring information flows, managing data versions, and developing tools to ensure and measure data quality.

From a technical perspective, it develops AI-based solutions, including deep learning and advanced analytics models for prediction, anomaly detection, and knowledge extraction from industrial data, as well as semantic approaches to improve data interpretation.

Finally, it participates in validation activities, ensuring that data, AI, and security solutions are robust and applicable in real industrial environments.