

SMARTEDGE is a European project on semantic low-code programming tools for edge intelligence, with **use cases in manufacturing, automotive, and healthcare.** SmartEdge seeks to dynamically integrate decentralized edge intelligence through a semantic-based collaboration among edge devices in a cross-layer toolchain, facilitating seamless and real-time distribution of autonomous intelligence swarms.

MANUFACTURING



USECASE

USING SWARMS OF MOBILE ROBOTS IN SMART FACTORIES

To realise the circular economy and promote local manufacturing, we need to build smarter, more adaptable factories which can produce a broader range of products in smaller batch sizes. SmartEdge factories will show how centralised fixed manufacturing systems can evolve into swarms of autonomous mobile robots, communicating and collaborating at the edge.



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LOW-CODE AND EDGE INTELLIGENCE FOR MANUFACTURING

Traditional manufacturing systems lack the agility for today's fast-paced market dynamics, with shorter product life cycles and a growing demand for customization. SmartEdge utilizes a Low-Code and Edge Intelligence



approach to streamline the integration of new production capabilities into existing automation systems. It employs a visual low-code environment where applications are built from drag-and-drop functions,

instantiated from pre-defined recipes. These recipes act as templates configured to gather data from field devices through standardized communication interfaces.

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