Intelligence is Your Edge

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SIEMENS

Continuous Learning in Software-Defined Manufacturing

This Siemens demo leverages Intel technologies for AI-driven object detection in 2D and 3D, enabling precise localization and classification for robotic motion planning. A 6-degree-of-freedom robot arm dynamically grips moving objects in random positions with hard real-time control at a 2ms cycle time.

The system integrates AI, motion planning, and a SoftPLC runtime for conveyor belt control, alongside a safety application that halts operations upon human detection. Utilizing Siemens' Robot Vision Control (RVC) and ECI, it accelerates time-to-market for intelligent robotic solutions.

Intel Product and Technology



Intel® Core processor

Intel® Core™ processors deliver high-performance computing for various applications, offering advanced Al acceleration, power efficiency, and seamless multitasking across consumer, commercial, and industrial devices.



Intel® RealSense™ Technology

Intel® RealSense™
Technology enables depth
sensing, 3D scanning, and
object tracking, enhancing AI,
robotics, and immersive
applications with advanced
computer vision and spatial
awareness capabilities.



Intel® Distribution of OpenVINO™ Toolkit

OpenVINO™ toolkit accelerates Al inference with lower latency, higher throughput, and optimized hardware use, enabling efficient deep learning in computer vision, LLMs, and generative Al.