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Mitsubishi Electric Corporation Invests in Realtime Robotics, Inc.

Will use startup's innovative technologies to improve performance and safety in industrial robot systems promptly

TOKYO, May 8, 2019 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today that it has taken an equity stake in Realtime Robotics, Inc. a U.S. technology startup that develops and commercializes motion-planning* technologies. Funding by Mitsubishi Electric is expected to accelerate the development of industrial robot systems offering enhanced safety and performance.

*Motion planning is the process of calculating and determining the optimized path that a robot should take to reach a goal without colliding with any obstacle. Realtime Robotics' motion path planning solution performs the necessary calculations in real time.

Going forward, Mitsubishi Electric expects to launch new industrial robot systems that integrate Realtime Robotics' motion-planning technologies by 2020. At the same time, Mitsubishi Electric will continue collaborating with other companies as well to further enhance its smart-manufacturing solutions with innovative technologies.

About Realtime Robotics

Company name	Realtime Robotics, Inc.
CEO	Peter Howard
Location	27-43 Wormwood St, Suite 110, Boston, MA 02210, USA
Establishment	March 2016
Business	Development of dedicated processors and software based on motion-planning technologies for industrial robots and autonomous vehicles.
URL	http://rtr.ai/

Background

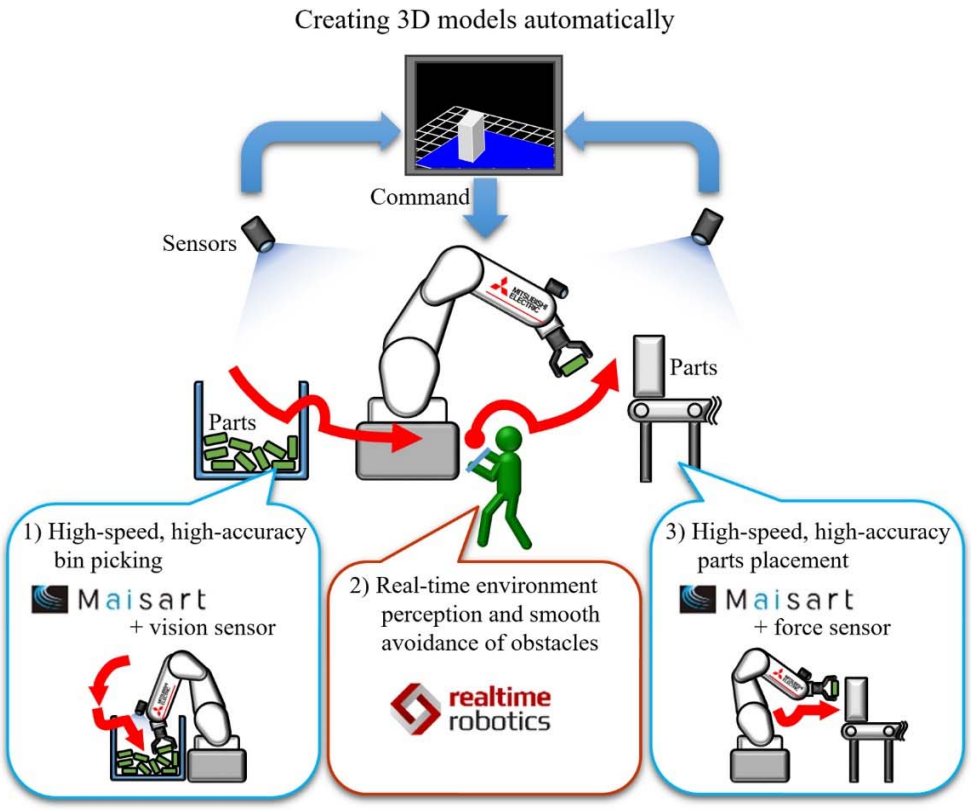
As workforces decline and labor costs rise in various markets worldwide, the importance and necessity of industrial robot systems continues to grow. Mitsubishi Electric is already meeting needs in such markets with its MELFA series of industrial robot systems, which deploy a high-speed, high-accuracy pick-and-place control solution based on vision capability, force sensors and Maisart®** AI technology. Industrial customers are now using the solution to supplement their limited human resources with advanced robot systems.

** Mitsubishi Electric's AI creates the State-of-the-ART in technology Maisart

Mitsubishi Electric, through its investment in and collaboration with Realtime Robotics, aims to accelerate the integration of it MELFA industrial robot systems with advanced motion-planning technologies. The envisioned new systems will perform tasks such as pick-and-place while autonomously, rapidly and smoothly avoiding collision with workers and obstacles in unstructured working environments. Mitsubishi Electric expects to use these increasingly safe and productive industrial robot systems to further enhance smart-manufacturing.

Robotic System Configurations Mitsubishi Electric Aims to Offer through Utilization of Realtime Robotics' Technologies (examples)

1) Random bin picking of unaligned parts, using Maisart AI technology and vision sensor (Mitsubishi Electric technology)
2) Perceiving working environments using sensor data to create 3D models automatically and avoid obstacles (Realtime Robotics technology)
3) High-speed, high-accuracy parts placement with sensitive force control using Maisart AI technology and force sensors (Mitsubishi Electric technology)



Sample robotics system using Realtime Robotics technologies

For More Information

Video of robotics system using Realtime Robotics' technologies:
https://vimeo.com/325858468/fdaa207880

About Maisart

Maisart encompasses Mitsubishi Electric's proprietary artificial intelligence (AI) technology, including its compact AI, automated design deep-learning algorithm and extra-efficient smart-learning AI. Maisart is an abbreviation for "Mitsubishi Electric's AI creates the State-of-the-ART in technology." Under the corporate axiom "Original AI technology makes everything smart," the company is leveraging original AI technology and edge computing to make devices smarter and life more secure, intuitive and convenient.

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About Mitsubishi Electric Corporation

With nearly 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded a revenue of 4,519.9 billion yen (US$ 40.7 billion*) in the fiscal year ended March 31, 2019. For more information visit:
www.MitsubishiElectric.com

*At an exchange rate of 111 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2019