

NTU AND DELTA ESTABLISH S\$24M LAB TO ADVANCE ROBOTICS TECHNOLOGIES



Singapore's Nanyang Technological University (NTU) and Delta Electronics have committed to advancing robotics research and development (R&D) with the setting up of the Delta-NTU Corporate Lab for Advanced Robotics.

Supported under Singapore's National Research Foundation's Research Innovation and Enterprise (RIE) 2025 plan, the S\$24 million lab will develop over three years next-

generation technologies aimed at overcoming labour shortage challenges for the manufacturing and intralogistics industries.

“The lab creates opportunities for us to translate our research into impactful, real-world innovations. This is in line with the NTU 2025 strategic vision to harness the power of digital and advanced technologies to support the discovery of new knowledge and promote better learning and living experiences,” said Professor Ho Teck Hua, President of NTU.

“The innovation milestones of this lab will help multiple industries solve key challenges, enhance Singapore’s long-term resilience, and improve the quality of life of its citizens,” said Yancey Hai, Chairman of Delta Electronics.

BUILDING ON SUCCESS

In 2016, the Delta-NTU Corporate Laboratory for Cyber-Physical Systems was launched with a focus on using cyber-physical systems to build technological capabilities for use in Smart Manufacturing and Smart Learning. In 2018, the lab was expanded to accommodate more research activities.

Over the five years, the team filed 17 patents, of which eight have been issued, and submitted more than 200 papers to journals and conferences. It also supported more than 140 NTU research staff and graduate students, as well as scientists and engineers from the Delta Research Centre in Singapore.

Notable projects include a universal smart navigation system where logistics robots autonomously move goods around factory floors, and a learning analytics technology to improve learning effectiveness in the education industry. These innovations, which were test bedded on NTU’s Smart Campus, are now being scaled up for wider adoption in the industry.

“Encouraged by the strong foundation laid in NTU’s initial collaboration with Delta Electronics, we are now ready to deepen the partnership by moving into R&D for advanced robotics. The joint research team aims to develop cutting-edge solutions that can address real-world challenges in a sustainable manner, in line with NTU’s Sustainability Manifesto which aims to strengthen global partnership for sustainable