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Japan's Ubitus collaborates with MacKay Memorial Hospital in Taiwan for AI-powered multi-modal medical robots

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Demonstrating the real-world impact of AI in healthcare

Japan-based Ubitus, a global leader in cloud streaming and artificial intelligence (AI) solutions, has announced its collaboration with Taiwan's MacKay Memorial Hospital to unveil AI-powered multi-modal medical robots at NVIDIA GTC Taiwan 2025.

The presentation, “AI-Enabled Healthcare: Multi-Modal Robot Collaboration Inspired by MacKay’s Case Study,” will highlight how NVIDIA technologies— NVIDIA Blackwell GPUs, NVIDIA Omniverse, NVIDIA Isaac GR00T, NVIDIA ACE, and NVIDIA Jetson AGX Orin—are transforming smart healthcare through automation, improved patient care, and enhanced efficiency.

As part of the collaboration, Ubitus and MacKay Memorial Hospital have co-developed three intelligent robots designed for various medical applications, combining NVIDIA’s cutting-edge technologies with proprietary AI models:

- AMR Robot: Equipped with a virtual assistant, this robot provides patient navigation, interactive companionship, and registration assistance, offering a more seamless and personalized patient journey.
- Humanoid Robot: Built on NVIDIA Isaac GR00T N1, the humanoid robot features advanced dual-arm manipulation, enabling autonomous specimen transport and material handling in unmanned settings to boost logistics efficiency.
- Quadruped Robot: Built on NVIDIA Jetson AGX Orin and integrating NVIDIA Isaac GR00T ReMemBr and NVIDIA Isaac GR00T X-mobility technologies, this robot navigates high-risk, hard-to-reach areas to perform environmental monitoring— including gas detection, thermal sensing, and water leakage detection— transmitting real-time data to reduce healthcare risks.

Ubitus plans to deepen its collaboration with MacKay Memorial Hospital and NVIDIA, expanding AI and multi-modal robotics across emergency, inpatient, rehabilitation, and long-term care settings.