

## HAPLY ROBOTICS Unveil Real-Time Physical Al and Teleoperation Demo Using NVIDIA Technology at SIGGRAPH 2025

MONTREAL, CANADA, August 6, 2025 /EINPresswire.com/ -- At <u>SIGGRAPH 2025</u>, <u>Haply Robotics</u> will showcase the future of robotics, simulation, and physical AI with a hands-on demonstration powered by <u>NVIDIA Omniverse</u>, <u>NVIDIA Isaac Sim</u>, and the NVIDIA RTX platform. Visit booth #728 to experience how intuitive haptics and powerful simulation converge through Haply's Inverse3X controller and a live Kinova robotic arm.

At the core is the Three Computer Solution, a next-generation architecture for intelligent robotics:

☐ Human Workstation – A desktop or laptop, powered by NVIDIA RTX GPUs, serving as the
user's portal for real-time haptic interaction, high-fidelity simulation, and immersive 3D graphics.
This workstation delivers a world-first: stable, low-frequency haptic interaction enabled by Isaac
Sim advanced physics modelling—allowing users to feel virtual objects with unprecedented
realism, even in complex, low-bandwidth environments

☐ Digital Brain – Powered by NVIDIA Isaac Sim, Omniverse, and NVIDIA Cosmos, the digital brain orchestrates simulation, AI training, and digital twin synchronization with realistic rendering and real-world physics. It enables the capture of rich demonstration data, imitation learning, and human-in-the-loop reinforcement learning, while models like NVIDIA Isaac GROOT provide high-level behavior control. Together, these NVIDIA platforms allow developers to build scalable, high-speed intelligence pipelines for robotic development—blending synthetic and real data to accelerate learning cycles.

☐ Physical Machine – A real teleoperated robot, such as the Kinova arm, trained and guided through the NVIDIA AI and simulation stack, and intuitively controlled via Haply's Inverse3X device. This system captures human motion and force input in real time, enabling tactile programming, adaptive behavior, and seamless mirroring between physical and digital worlds

This system allows users to intuitively control robots, train AI models with imitation learning, and build physically realistic environments—all with real-time responsiveness. Haply's Inverse3X acts as the human's 3D interface to this ecosystem, capturing touch, motion, and intent for both physical and virtual domains.

## Demo Highlights

☐ Robot Teleoperation + Digital Twin – Control a Kinova robot with tactile feedback while

simultaneously viewing its digital twin powered by Isaac Sim running on RTX.

Using NVIDIA hardware and software, the system performs complex kinematics and haptic calculations at up to 10 kHz, ensuring lifelike interaction and minimal latency.

"We are the 3D human interface to NVIDIA's Three Computer Solution," said Colin Gallacher, Cofounder of Haply Robotics. "Whether sculpting virtual worlds, programming robots, or training AI through touch, we make spatial interaction intuitive."

Visit booth #728 to experience:  ☐ NVIDIA-accelerated real-time digital twins
1 WIDIA-accelerated real-time digital twins
☐ Teleoperated robotics
☐ Isaac Sim + Omniverse integrations
1 Isaac Siiii - Ollilliverse integrations
☐ Scalable AI training using real and synthetic data
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