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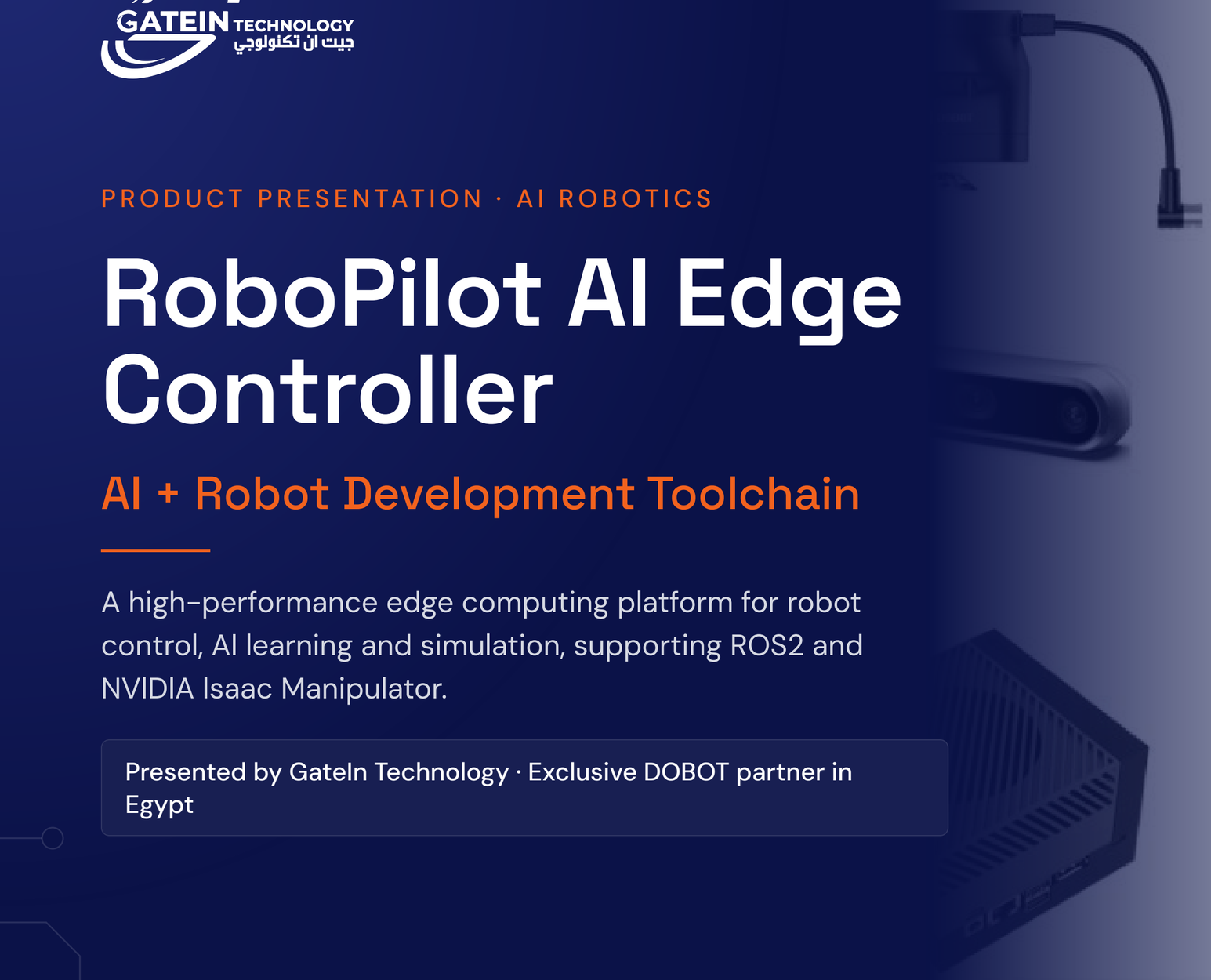
PRODUCT PRESENTATION · AI ROBOTICS

RoboPilot AI Edge Controller

AI + Robot Development Toolchain

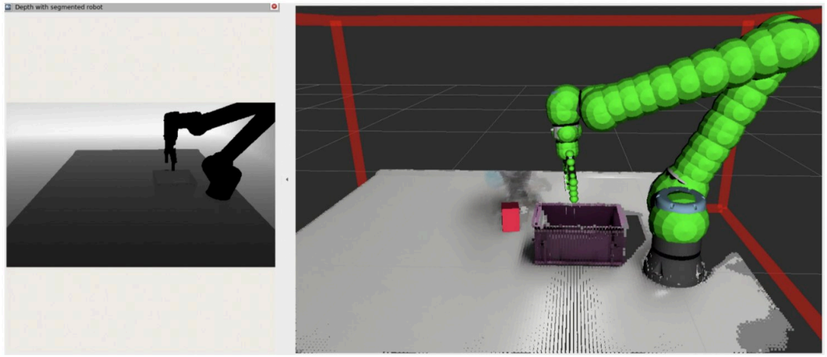
A high-performance edge computing platform for robot control, AI learning and simulation, supporting ROS2 and NVIDIA Isaac Manipulator.

Presented by GateIn Technology · Exclusive DOBOT partner in Egypt





RoboPilot product features



High-performance edge computing

NVIDIA Jetson GPU for AI reasoning and deep learning training in real time.

Integrated 3D vision

Intel 3D depth camera for recognition, tracking and pose estimation.

SDK development support

Pre-installed ROS2, full object-grabbing demo and tutorials.

Deep & reinforcement learning

Path planning, obstacle avoidance and grabbing; quick algorithm verification.

Simulation environment

NVIDIA platform with Isaac Manipulator GPU acceleration.

Product support

Compatible with CR3A and CR5A.

Scenarios & teaching content

University AI robot platform

Robot + AI courses; verify obstacle avoidance, path planning, detection and grasping.

Scientific research

Simulation and algorithm verification for ML, computer vision and control.

Technology exhibitions

Interactive AI + robot demonstrations.

Basic robot control

Communication and motion control.

ROS2 learning

Pre-set environment, tutorials and code examples.

3D vision & AI simulation

Segmentation, tracking, pose estimation; Isaac-based grasping and planning.

RoboPilot Components & parameters

Item	Details
Core components	Jetson AGX Orin AI edge controller × 1, 3D camera × 1, camera cable × 1, camera adapter plate × 1, SSD × 1, electric suction cup × 1 with aviation plug cable, tool kit
Controller	Jetson AGX Orin · 15–60 W
USB	3 × USB 3.2 Gen 2 (10 Gbps), 4 × USB 2.0
Other I/O	4 × UART, 3 × SPI, 4 × I2S, 8 × I2C, 2 × CAN, PWM, DMIC, DSPK, GPIO
3D camera range · min-Z	0.6–6 m · ~52 cm
Depth FOV · resolution · fps	87° × 58° · up to 1280 × 720 · up to 90 fps
RGB	Up to 1280 × 800 · 90° × 65° FOV
Camera size · connector	124 × 26 × 29 mm · USB-C 3.1 Gen 1

The robot arm is not included and must be purchased separately. Images of simulation courtesy of NVIDIA Isaac Manipulator.

GateIn One accountable partner

We don’t just ship the RoboPilot. GateIn designs, supplies, installs, integrates and supports DOBOT solutions for universities, schools, government and industry, from the first plan to long-term support.

+120
ROBOTS SUPPLIED IN EGYPT
Industrial, service and educational

91
LABORATORIES
Across 45 institutions

+30
STRATEGIC & GLOBAL PARTNERS

5
YEARS OF DELIVERY
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An integrator, not a vendor.

Exclusive DOBOT partner for Egypt

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Let’s plan your RoboPilot deployment

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