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Emobodied Intelligence Robot Education Solutions

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01

ENTERPRISE INTRODUCTION

Global sales have maintained a leading position over the years:
The world's first company to publicly retail high-performance quadruped robots and the earliest to achieve successful industry deployment.

Exceptional product leadership:
Continuously advancing expertise in core robotic components, motion control, robot perception and decision-making, and robotics AI, setting industry standards.

- Unitree Robotics is a globally renowned civilian robotics company specializing in the independent research, development, production, and sales of consumer-grade and industrial high-performance general-purpose quadruped and humanoid robots, as well as dexterous robotic arms.
- The company has been invited to participate in prestigious events such as the 2021 CCTV Spring Festival Gala, the 2022 Winter Olympics Opening Ceremony, the 2023 Super Bowl pre-game performance, the 2023 Hangzhou Asian Games, the Asian Para Games, and the 2025 CCTV Spring Festival Gala, and has been repeatedly covered by authoritative media outlets including CCTV News.

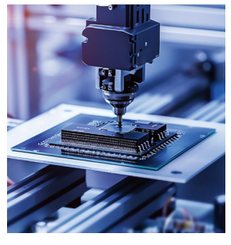
Golbal Leadership

Since 2013, Unitree Technology has been committed to the independent research and development of high-performance general-purpose quadruped and humanoid robots for consumer and industrial markets. We keep self-innovation in both software and hardware and possess the largest portfolio of quadruped robot-related patents in related patents in China.



Core In-House Research and Deveolopment

We independently develop motors, reducers, encoders, and various robot sensors (such as cameras and lidar), alongside proprietary algorithms covering motion control, perception, navigation, and AI.



Technology Driven

Within six months, we developed the universal Humanoid H1, Robot H1 and began mass production, continuously iterating and updating. Its overall performance is globally leading, with a running speed of 3.4 m/s. It is the world's first full-size, fully electric humanoid robot capable of performing a stationary backflip.



02

SOLUTION

Innovative Education Solutions for Embodied Intelligence

➤ Experimental Equipment System

The experimental equipment is human-centered, simulating, extending, and enhancing human intelligence;
It is categorized into four groups: robots, curriculum packages, accessories, and training kits;
Featuring various PBL projects that can be easily set up and studied in classrooms to explore embodied intelligence application systems across multiple industries;
We provide embodied intelligence training kits with comprehensive manuals for students who demonstrate keen interest and exceptional performance in embodied intelligence,
further advancing their capabilities in innovative embodied intelligence applications and contributing to the comprehensive enhancement of school capabilities.

Execution Unit



Humanoid Robot



Quadruped Robot

Perception Unit

Depth Camera



Visual Capability

Voice Suite, Microphone, Speaker, Audio System, etc.



Auditory and Speech Capability

LiDAR



Environmental Perception Capability

Decision Unit



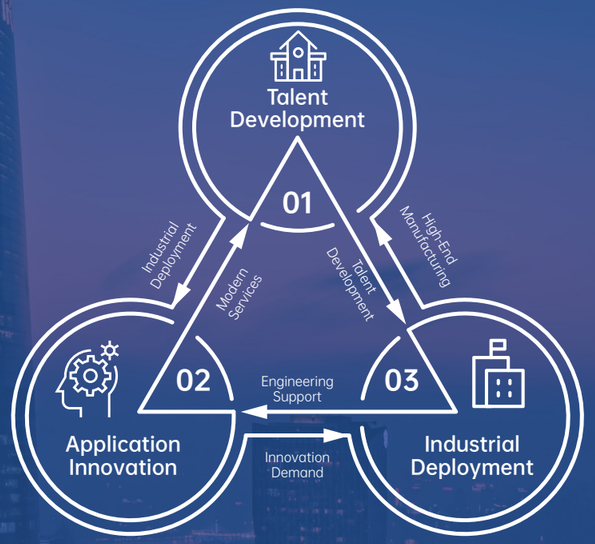
Central Processing Unit



Intelligent Algorithms



Development Model



Applicable Fields

Integration of science and education, unified cultivation and research, industry-academia integration, and school-enterprise collaborationOriented towards new artificial intelligence technologies, exploring new directions for professional transformation and upgrading

Teaching: Artificial intelligence education at vocational, undergraduate, and postgraduate levels, comprehensively covering laboratory construction, hardware operation, software programming, cur-riculum resources, and faculty training.

Research: As a research and development platform in artificial intelligence, it specializes in experimental validation and scientific innovation in key technical domains including robot design, motion control, and visual perception.

Competition: The robot demonstrates superior performance, complying with international standards for robotic platforms, and supports authoritative robotics competitions both domestically and internationally.

Applicable Programs

Intelligent Robotics Technology	Electrical Engineering	Robotics Engineering	Electronics and Information Science
Artificial Intelligence Engineering Technology	Software Engineering	Systems Engineering	Automation
Applications of Artificial Intelligence Technology	Computer Science	Artificial Intelligence	Mechanical Engineering

Experimental Equipment System



Curriculum Framework

In collaboration with expert teams from leading domestic normal universities, centered on the embodied intelligence knowledge system, jointly developing embodied intelligence curricula aimed at constructing simplified embodied intelligence systems, to cultivate students'practical skills and innovative application capabilities.



Teacher Training

Under the guidance of leading education experts, we deliver a teacher training program aligned with Embodied Intelligence standards, integrating PBL project-based learning and internationally advanced teaching methodologies throughout.



Standardized Laboratory Development

Utilizing an open-space zoned design, combined hardware and software learning platforms, systematic configurations, and scientifically designed spaces to ensure high efficiency in both teaching and learning.



Club Activities

Through school-enterprise collaboration, we organize expert lectures, research study tours, and other activities to enrich extracurricular learning, stimulate students' interest, and foster autonomous learning and teamwork skills.



Competition Platforms

Competitions such as the RoboCup(Robot World Cup), Legged Robot Challenge (Previously IROS&ICRA QRC) and ICCV Humanoid–Object Interaction Challenge serve as platforms providing resources for a closed-loop learning evaluation system.

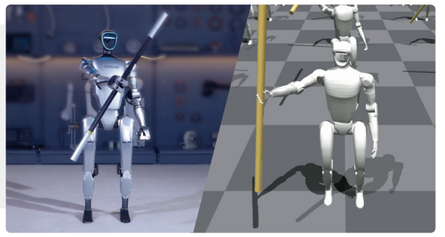
03
DEVICE
Hardware Equipment

Universal Humanoid Development Platform — G1



1. Exceptional agility beyond human norms
Extra-Large Joint Range of Motion,
23 to 43 Joint Motors.

2. Driven by imitation and reinforcement learning
Robotics technology, accelerated by AI,
is continuously upgrading and evolving.





3. Force-controlled dexterous hand, capable of manipulating all objects
Integrating force and position hybrid control,
sensitive and reliable, capable of simulating
the human hand for precise manipulation
of objects.

4.UnifoLM (Unitree Robot Unified Large Model)
Robot world model, offering a co-creation
platform—UnifoLM, ushering in a new
era of intelligent agents collaboratively.



Physical Specifications Weight Approx 35 kg Height Approx 132 cm	**Max Joint Torque** 120 N.m	**Dex3-1 Force-Controlled Dexterous Hand** 3-Finger Force-Controlled Dexterous Hand
Battery Life Approx 2 h	**Total Degrees of Freedom** ≤ 43 DOFs	**360°Perception Detection** 3D LiDAR + Depth Perception

Universal quadruped development platform—Go2

Tracking Module
Remote-controlled or
automatic tracking

Front Camera
Image tansmission Resolution 1280*720
FOV 120 °
Ultra wide angle lens deliver rich clarity

Front Lamp
Brightly lights the
way ahead

Intercom Microphone
Effective communication with
no scenario restrictions

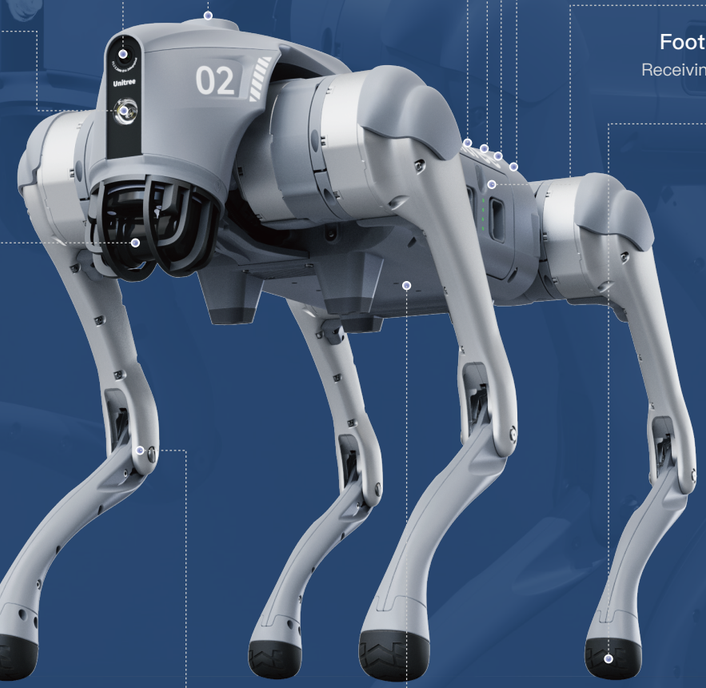
Self-retracting Strap
Easy to carry and
load things

Powerful Core
·Motion controller
High-performance ARM processor
·Improved AI algorithm processor
External ORIN NX/NANO

Hardware Upgrade
·3D LIDAR
·4G ESIM Card(with GPS)
·WiFi6 with Dual-band
·Bluetooth 5.2
for stable connection
and remote control

Smart Battery
Standard 8000m Ah battery
Long-endurance 15000m Ah battery
Protection from over-temp,
overcharge and short-circuit

Foot Force Sensor
Receiving foot perception
in real time



4D LiDAR L1
360°*90° omnidirectional
ultra-wide-angle scanning allows
automatic avoidance with small blind
spot and stable operation

12 Knee Joint Motors
Strong and powerful
Beautiful and simple
Brandy new visual experience

Speaker for Music Play
listen to music as your pleasure

01 Smart Tracking System



ISS 2.0 Smart Track

By implementing an entirely new wireless vector positioning and control technology, positioning accuracy has improved by 50%, with remote control range exceeding 30 meters [1]. Coupled with optimized obstacle avoidance strategies, the robot achieves superior adaptability to complex environments.

[1] Open environment without interference or obstacles

02 Performance Upgrade



Joint performance enhanced by 30%

The Go2 robot's knee joint peak torque has been upgraded to 45 N·m [2], incorporating an internal wiring design and a heat pipe-assisted cooling system within the knee joint motor area to effectively reduce temperature.

[2] 12 Joint Motors,maximum torque varies; this value represents the peak torque of the largest joint motor

03 Extended Battery Life



Increased battery capacity by 150%.

The Go2 robot's battery capacity has been upgraded to 8000mAh, with an optional 15000mAh ultra-long endurance battery. The voltage has been increased to 28.8V, improving motor efficiency and stability.

04 Advanced AI Modes



Extensive motion postures

Leveraging large-scale AI simulation training, the Go2 robotic dog has mastered advanced gaits including handstand walking, adaptive rollover recovery, and obstacle climbing, while demonstrating exceptional flexibility and stability. Capable of performing diverse motions such as jumping, stretching, shaking hands, expressing happiness, pouncing, and sitting.

Quadruped Robot Training Platform

The quadruped robot training platform is a platform designed for university teaching, scientific research, and innovation practice.
Its hardware integrates an advanced motion control system, a full-spectrum sensor suite, and an open software interface, providing a systematic and extensible foundation for training in automation, computer science, and artificial intelligence–related disciplines.

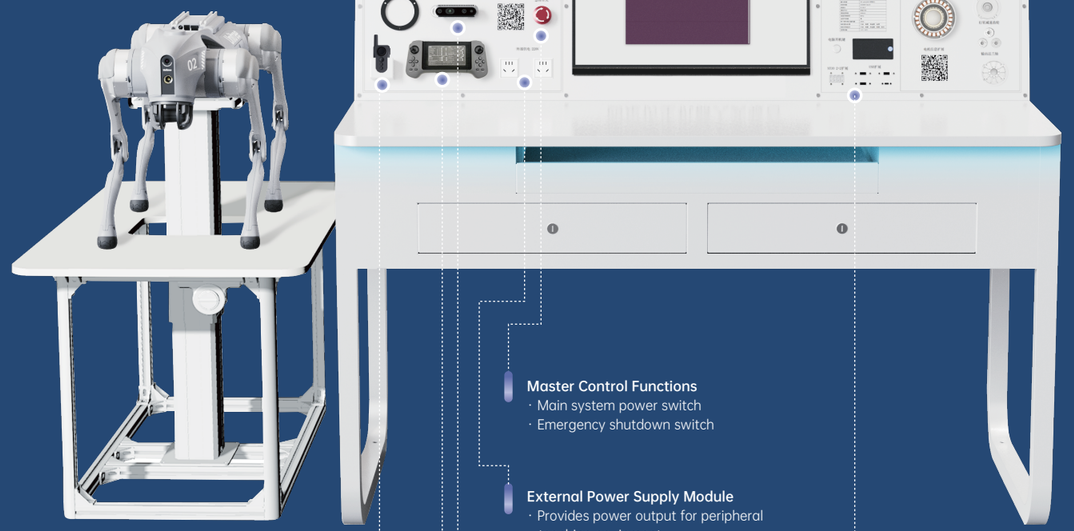
Core Hardware Specifications & Functional Modules

Voice Input / Output System
· Microphone input module
· Loudspeaker output module
Used for multimodal interaction, voice control, and HRI (Human–Robot Interaction) training.

IMU Sensor
· Demonstrates IMU attitude and acceleration measurement principles
· Supports posture acquisition and balance-control algorithm experiments

Typical Transmission Component Display Area
Includes:
· Planetary gear set
· Motor frame
· Sprocket
· Main shaft bearing
· Coupling
· Incremental encoder

M8010-6 Direct-Drive Motor Disassembly Module
Displays the complete internal power-transmission chain of the motor, including:
· Motor control principles
· Drive system structure
· Encoder feedback & closed-loop control
· Torque generation mechanisms & transmission fundamentals



Master Control Functions
· Main system power switch
· Emergency shutdown switch

External Power Supply Module
· Provides power output for peripheral teaching equipment
· Includes safety-protection design for electrical engineering experiments

UWB Module
· Demonstrates high-precision localization capability
· Supports indoor positioning, robot swarm coordination, and multi-robot collaborative tasks

Depth Camera Module
· Structured-light / depth sensing
· Supports 3D measurement, human detection, and target localization

Go2 Robot Remote Controller
· Manual teleoperation device
· Supports gait tuning and remote-operation training

I/O & Expansion Interfaces
· USB-A × 3
· USB-C 3.0 × 1
· Gigabit Ethernet × 1
· Dedicated Go2 direct power output × 1
· General 220 V power output × 2
· Supports Wi-Fi / Bluetooth wireless development

Four Categories of Educational Training Courses

This training system covers four major directions: low-level robot control, multi-modal perception, multi-leg motion control, and engineering-oriented project practice.
It forms a complete learning path from “single-point skills” to “system-level engineering capability,” supporting academic curricula in AI, robotics, and mechatronics, as well as competitions, scientific research, and vocational skills training.

Low-Level Motor Control Training



Motor Forward/Reverse Control Experiment
Learning Objectives:
Master the fundamentals of direct-drive motor control, including PWM, drive current, and commutation logic.

Key Topics
· Motor fundamentals & torque generation
· Device access in Linux environments
· C++ control program development
· Motor speed, direction, and torque adjustment experiments

Precise Motor Angle Control Experiment
Learning Objectives:
Learn how to implement closed-loop control (PID) to achieve accurate joint angle regulation.

Key Topics
· Encoder-based angle measurement
· Closed-loop (PID) control design
· Network command issuance & real-time feedback
· C++ programming for joint angle & trajectory control

Locomotion & High-Level Motion Control Training



Multi-Leg Motion Control Experiment
Learning Objectives:
Achieve single-leg and multi-leg rhythmic control; learn kinematics & joint trajectory planning.

Key Topics
· Unitree SDK2 advanced control interfaces
· ROS2 basic publish/subscribe
· C++ trajectory planning & joint control
· Single-leg / dual-leg motion reproduction

Gait Motion Control Experiment
Learning Objectives:
Learn stable gait generation & control strategies under real ground conditions.

Key Topics
· Unitree SDK2 ground-contact control
· ROS2 control framework & callback mechanism
· C++ kinematics / inverse kinematics
· Python auxiliary tools (logging, analysis)
· Linux-based control tuning

Project-Based Engineering Training



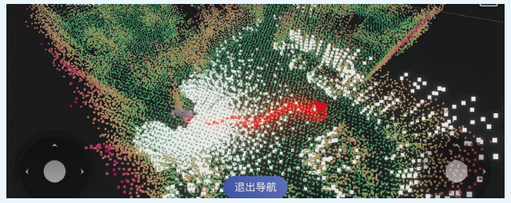
Quadruped Robot Operation & Maintenance
Learning Objectives:
Master assembly/disassembly, calibration, diagnostics, and maintenance — suitable for mechatronics and intelligent-manufacturing programs.

Key Topics
· Basic assembly & mechanical structure cognition
· Motor & sensor fault diagnosis
· Component calibration procedures
· Linux system maintenance & log analysis
· Secondary-development environment deployment

Quadruped Robot Simulated Inspection Project
Learning Objectives:
Build a complete “simulation inspection” project covering perception → planning → execution.

Key Topics
· Calling Unitree SDK2 inspection/ obstacle-crossing interfaces
· Terrain perception (vision & LiDAR)
· Obstacle-crossing path planning
· Motion-library invocation & execution strategies
· Real cases of secondary-development application

Perception & Sensing Training

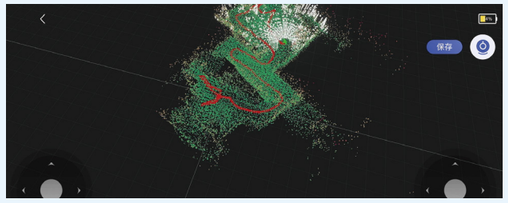


Visual Signal Acquisition Experiment
Learning Objectives:
Acquire robot vision data, perform basic image processing, and call perception interfaces.

Key Topics
· Using SDK to read image streams
· Basic OpenCV operations
· ROI extraction & edge detection
· Foundation for visual navigation and detection

IMU Data Acquisition Experiment
Learning Objectives:
Understand the role of IMU in robotics and complete posture estimation & motion-state analysis.

Key Topics
· IMU data format interpretation
· Calculating acceleration, angular velocity, attitude angles
· IMU noise & filtering
· Robot tilt & posture determination



LiDAR Experiment
Learning Objectives:
Master LiDAR data acquisition, point-cloud formats, and basic obstacle detection.

Key Topics
· Unitree SDK2 LiDAR interface
· ROS2 topic subscription & visualization
· Basic point-cloud processing
· Obstacle recognition & distance estimation

Audio Signal Experiment
Learning Objectives:
Understand multi-modal sensing through real audio acquisition and basic sound classification.

Key Topics
· Microphone data reading
· Secondary-development interface usage
· Basic audio classification
· Entry-level voice-command interaction

CURRICULUM SYSTEM

04

Course Overview

- Encompassing comprehensive knowledge including Embodied Intelligence Theory, foundational technologies, and various supporting hardware and software
- Utilizing robots as the primary learning platform
- Founded on proficient command of programming languages as the learning basis
- Emphasizing a project-based experimental approach throughout the entire knowledge framework

Course Characteristics

- Encompassing typical intelligent application cases across various industries.
  Developing students' awareness of Embodied Intelligence through analysis of the social and economic benefits of practical cases.
- Based on programming languages.
  Eliminating the mixed teaching model of 'programming + robot + Embodied Intelligence,' the Introductory Course is prioritized as an independent and systematic study during the ini-
  tial and beginner stages, making Embodied Intelligence easy to learn, teach, and master.
- Centering on the systematic learning of the Embodied Intelligence knowledge system.
  Consisting of four course categories: Introductory, Compulsory, Application, and Interest courses, featuring twelve sets of instructional materials, which schools may offer selectively.
- Adopting a project-based learning approach
  Integrating knowledge construction, skill development, and cognitive advancement into the use of embodied intelligence tools to solve problems and complete tasks.
- Aimed at building simple embodied intelligence systems as the learning objective
  Combining theoretical study and practical application, delivering instruction on embodied intelligence across perception, decision-making, and execution levels; developing students' hands-on skills through incremental project-based practice.

Course Type



Theoretical Course

Focusing on the Embodied Intelligence knowledge system, theoretical study encompasses an overview, features, applications, and key technologies of Embodied Intelligence.



Theoretical And Practical Course

The course adopts a theory-driven structure complemented by small-scale practical sessions. Through hands-on activities, students deepen their understanding of theoretical concepts, validate these theories in practice, and consolidate their knowledge and learning outcomes.



Comprehensive Semester Application Course

At semester's end, a large-scale practical project is conducted, comprehensively applying the theories, knowledge, and skills acquired during the term; students collaborate in groups to construct extensive application scenarios, integrating prior and new knowledge, with creative design facilitating further expansion.



Industry Application Course

Select typical application scenarios of embodied intelligence across various industries, study the underlying logic and industry-specific knowledge of these scenarios, and comprehensively enhance students' scientific literacy.

Applications of Humanoid Robots

Course Title	Application of Humanoid Robot	Course Duration	Total Hours: 46
Course Category	Integrated Practical Course	Course Credits	Elective
Course Type	Theory and Practice Integration	Module Type	Compulsory
Applicable Majors	Electronics / Mechical and Engineering / Artificial Intelligence		

"Application of Humanoid Robots" is an integrated practical course in the field of humanoid robotics. This course is based on Unitree Technology's G1 robot to develop a digital twin comprehensive project, encompassing the use of simulation development environments, reinforcement learning training and deployment on actual machines, sensor data acquisition and application, as well as the implementation and deployment of algorithms for target recognition and path planning. It aims to cultivate students' overall development capabilities in the humanoid robotics domain.

Chapter	Practical Training Project Name	Content Requirements	Class Hours
Chapter 1	Introduction to and Fundamentals of Humanoid Robots	Introduce the Hardware and Software Architecture of the G1 robot and familiarize users with the robot's operation methods (remote controller control Controlled via manufacturing systems and mobile applications.	4
Chapter 2	Development of Humanoid Robot Simulation Systems	Familiarize with the installation and use of the Simulation Development Environment, mastering model loading methods and secondary development processes.	4
Chapter 3	Locomotion Control of Humanoid Robots	Based on reinforcement learning algorithms, complete the robot's walking task in the simulation environment and deploy it to On the actual device.	6
Chapter 4	Perception Systems of Humanoid Robots	Master the methods for acquiring Depth Camera and LiDAR data in both simulation environments and on actual devices.	5
Chapter 5	Target Recognition in Humanoid Robots	Perform specific target recognition in both simulation environments and on actual devices based on Depth Camera data.	5
Chapter 6	Localization Systems of Humanoid Robots	Achieve self and target object localization based on Depth Camera data in both simulation environments and on actual devices.	6
Chapter 7	Path Planning for Humanoid Robots	Implement path planning in both simulation environments and on actual devices based on localization data and target tracking.	6
Chapter 8	Comprehensive Practical Applications of Humanoid Robots	Conduct comprehensive debugging in the simulation environment based on the Digital Twin project and deploy to the actual device for verification and debugging.	10

Applications of Quadruped Robots

Course Title	Application of Intelligent Robots	Course Duration	Total Duration: 56 Hours
Course Category	Integrated Practical Course	Course Credits	Elective
Course Type	Theory and Practice Integration	Module Type	Compulsory
Applicable Majors	Electronics / Mechatronics / Artificial Intelligence		

The Application of Intelligent Robots' is a multidisciplinary practical training course in robotics. This course is built upon Unitree Technology's Go2 Edu robot platform and encompasses embedded system development, sensor integration, robot system integration, and application development, aiming to cultivate students' comprehensive development capabilities in the robotics domain.

Chapter	Practical Training Project Name	Content Requirements	Class Hours
Chapter 1	Introduction to the Go2 Robot Platform	Present the hardware and software architecture of the Go2 robot, and become proficient in its operation methods (controller and mobile app control).	2
Chapter 2	Getting Started with the Development Environment	Proficient in using the Go2 robot basic development environment, including custom programming and debugging workflows for the Go2 robot.	2
Chapter 3	Usage of Basic Modules	Proficient in activating and utilizing obstacle avoidance functions and controlling robot lighting.	4
Chapter 4	Low-level Motion Control	Implementation and debugging of low-level motion control, precise control of robot legs, and development of a motion control debugging framework.	2
Chapter 5	High-level Motion Control	Proficient in using the Go2 robot high-level control interface to execute complex motion control.	2
Chapter 6	Remote Controller Status Acquisition	Acquisition of remote controller status data and development of custom functionalities.	4
Chapter 7	Obstacle Avoidance Data Acquisition	Construction of obstacle avoidance maps based on LiDAR for effective obstacle perception.	4
Chapter 8	Path Planning and Autonomous Navigation	Implement path planning and autonomous navigation for the Go2 robot based on LiDAR.	4
Chapter 9	Multimedia Data Acquisition	Acquire and display real-time multimedia stream data and images through the robot's built-in high-definition camera. Image data.	4
Chapter 10	Gesture Recognition	Control the Go2 robot's movements via gesture recognition.	4
Chapter 11	Human-following Motion	Enable the Go2 robot to track humans through human posture recognition.	8
Chapter 12	Multifunctional Integrated Practice	Master the comprehensive applications of the Go2 robot to realize intelligent logistics capabilities.	16

Teacher Training





Knowledge and Skills

Implement a course on Embodied Intelligence Theory and its core technologies, supported by specialized practical sessions to thoroughly enhance educators' AI knowledge and competencies.

Teaching Methods and Competencies

Systematically deliver project-based learning (PBL) courses to enable educators to master the processes for fostering computational and innovative thinking, as well as the design of AI curricula and associated pedagogical skills.

Sharing and Improvement

Through team projects, expert seminars, and sharing of exemplary case studies, we facilitate teachers in sharing AI teaching experiences, thereby improving the quality of AI curriculum delivery.

05

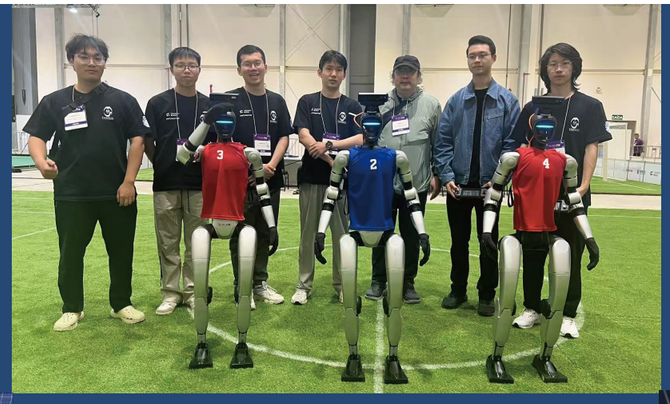
COMPETITION SYSTEM

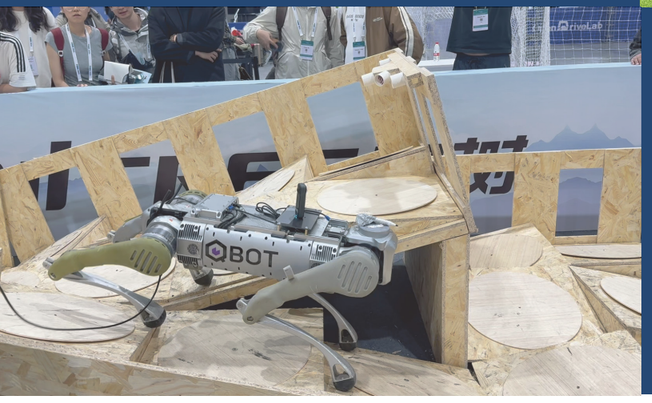
Robotics competitions are a vital tool for talent development in educational institutions and industrial advancement. Unitree Technology is dedicated to advancing the philosophy of 'enhancing learning through competition, enhancing teaching through competition, and enhancing research through competition,' seamlessly integrating education, competition, scientific research, and application to provide a platform for faculty and students to showcase their talents. The company's quadruped and humanoid robots serve as standard competition platforms and are eligible for multiple national-level competitions.

Event Name	Organizers	Competition Category	Applicable Devices
RoboCup	RoboCup Federation Committee	RoboCupSoccer Humanoid League Adult Size	G1-Comp
Legged Robot Challenge (Previously QRC)	IROS & ICRA	Legged Robot Challenge (Previously QRC)	All
ICCV Humanoid–Object Interaction Challenge	ICCV	Human-Robot-Scene Interaction and Collaboration	G1-Edu H1-Edu

01 ▶

RoboCup





◀ 02

Legged Robot Challenge (Previously QRC)

03

ICCV Humanoid-Object Interaction Challenge





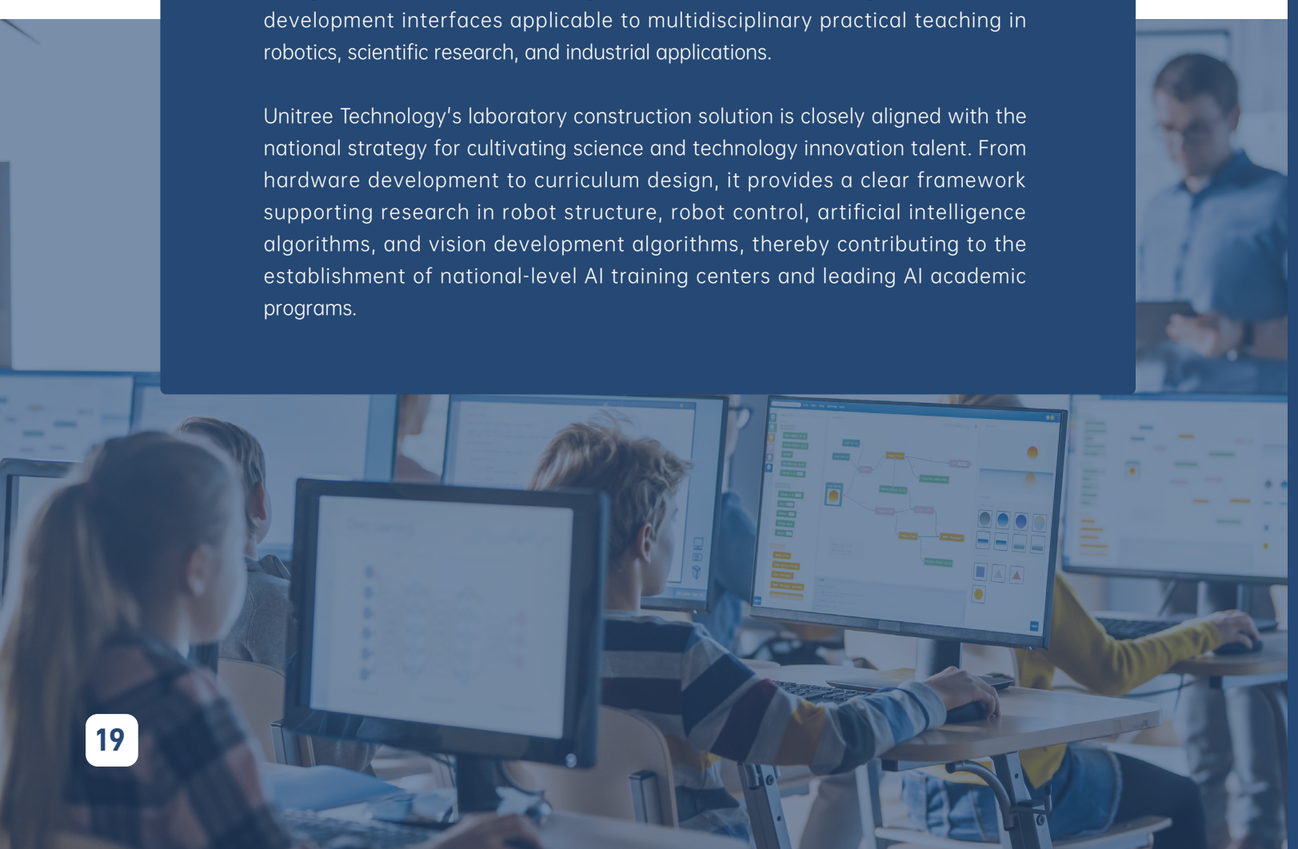
06

LABORATORY CONSTRUCTION

Laboratory Overview

Unitree Technology's robot product series comprises biomimetic intelligent robots targeted at the education, scientific research, and industrial sectors. They feature multi-modal motion capabilities and autonomous positioning, navigation, and recognition functions, delivering motion control and intelligent perception development interfaces applicable to multidisciplinary practical teaching in robotics, scientific research, and industrial applications.

Unitree Technology's laboratory construction solution is closely aligned with the national strategy for cultivating science and technology innovation talent. From hardware development to curriculum design, it provides a clear framework supporting research in robot structure, robot control, artificial intelligence algorithms, and vision development algorithms, thereby contributing to the establishment of national-level AI training centers and leading AI academic programs.



Laboratory Scene

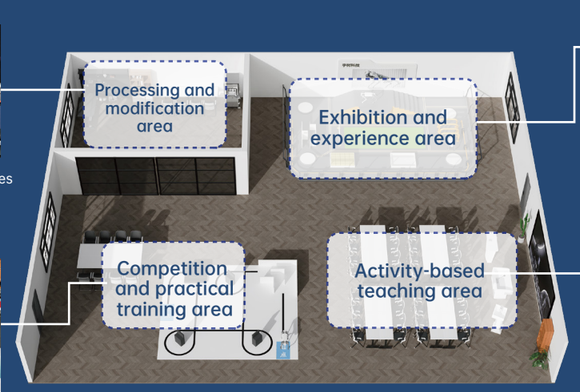
The laboratory emphasizes theoretical teaching and practical skills training, divided into an activity teaching area, competition training area, exhibition experience area, and processing modification area. Each area corresponds to distinct application scenarios and content.



Carrying out practical training activities such as equipment assembly, maintenance, and modification



Conducting instructional activities including competition training and practical exercises





Presenting teaching case demonstrations Including equipment storage and management tasks



Completion of instructional teaching and group discussions Teaching activities such as reading and study

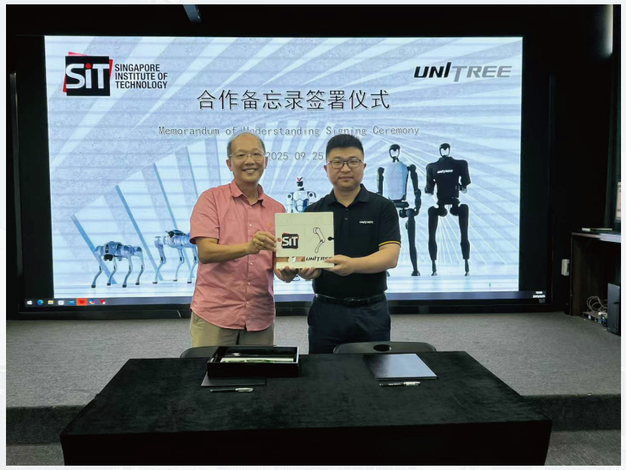
Laboratory Equipment List

The standardized laboratory is designed for students enrolled in Artificial Intelligence and Robotics courses. It is equipped with G1-EDU Humanoid Robots, Go2-EDU Quadruped Robots, and related facilities, supporting teaching and practical training for a single class of up to 30 students.

Index	Product Name	Quantity
01	G1-EDU	10 units
02	Go2-EDU	10 units
03	Virtual Simulation Platform	30 sets
04	Teacher Training Services	1 time
05	Robot Development Cases and Source Code	12 sets
06	Course Resources	Open-sourced
07	Technical Development Documentation	Open-sourced

07 COOPERATE

#01
Singapore Institute of Technology, SIT



As Singapore's first "Application Oriented University," Singapore Polytechnic is establishing an industry-open integrated testing ground at its new Punggol Digital District campus, providing a "block-level" validation environment for systems such as robotics and intelligent transportation.

SIT and Unitree Robotics have signed a Memorandum of Understanding (MoU) to establish a joint laboratory in Singapore focused on "embodied intelligence, human-robot interaction, and robot safety and regulation." Leveraging the open testbed at the new campus, the collaboration will conduct joint R&D and demonstration applications of quadrupedal/humanoid robots in campus, community, and industrial settings.

The joint lab will integrate Unitree's quadruped and humanoid robot platforms with SIT's existing ROS/robotics systems curriculum, SPICE_RaPID robotics innovation program, and Professional Officer team. This will create an integrated ecosystem spanning undergraduate education, applied research, and corporate collaborative innovation. The initiative will focus on cultivating high-level engineering talent in service robotics, smart city operations, and safety standards for human-robot collaborative environments.

#02
City University of Macau



Building upon disciplines such as the School of Data Science and Intelligent Technology & Services, City University of Macau continues to advance robotics and multimodal data research centered on "Artificial Intelligence + Embodied Intelligence." The university's research teams actively engage in international collaborations within embodied intelligence and reinforcement learning. They conduct systematic research on quadruped robot motion control and policy learning, utilizing platforms like Unitree Go1 for simulation validation and policy evaluation. Key focuses include stability and sample efficiency across complex terrains and long-duration trajectories.

Concurrently, the university hosts and participates in multiple international conferences and forums related to quadrupedal robotics and educational applications. For instance, within the FSDM 2025 project, it undertakes topics like "Design of a Low-Cost Quadruped Robot for Education," positioning quadrupedal robots as a vital vehicle for higher education and innovative teaching.

PARTNER CUSTOMER

08



- Unitree Robotics, leveraging its independently developed core components, motion control algorithms, and robot perception systems, has established collaborations with numerous top-tier academic institutions and leading technology enterprises.

- Unitree Technology not only provides clients with technical support including software development and mechanical programming, but also assists in configuring a variety of external devices, enabling applications in smart inspection, ground exploration, and detection across multiple scenarios.

- Robotics technology has become a crucial driving force for innovation and upgrading across various industries. Currently, hundreds of brands in sectors such as petrochemicals, inspection, electric power, and education have deployed Unitree Technology's robots. Unitree Technology is dedicated to empowering industry development by delivering mature product solutions and comprehensive technical support services, working together with you to create an intelligent future.

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