UBTECH

PROGRESSIVE STUDY FOR ALL GRADES:

From primary, secondary to university students.

LINKING AI WITH THE REAL WORLD:

The APP is used as a tool and means, from a hands-on experience, problem-solving. Once a robot is built the student then learns basic programming skills through the scratch program. Combining Science, Technology, Engineering and Mathematics (STEM).

RICH TEACHING RESOURCES:

Covering lesson plans, textbooks, teacher's handbooks, teaching kit & programming software.

DOWNLOAD THE APP

Use a compatible iOS or Android device to download the JIMU Robot app. Share or discover new models and connect with other creators in our international robotics community.

BUILD.

BUILD YOUR ROBOT

Choose to build either the robot using the 3D, 360° animated instructions that will guide you through each step of construction. You can also choose to build your own JIMU robot.

CODE.

PROGRAM YOUR ROBOT

Blockly coding makes programming simple and fun. Drag-and-drop interlocking blocks of customisable sequences to make your JIMU robots navigate obstacles, pick-up objects, control light and sound effects, show emotions, and more.
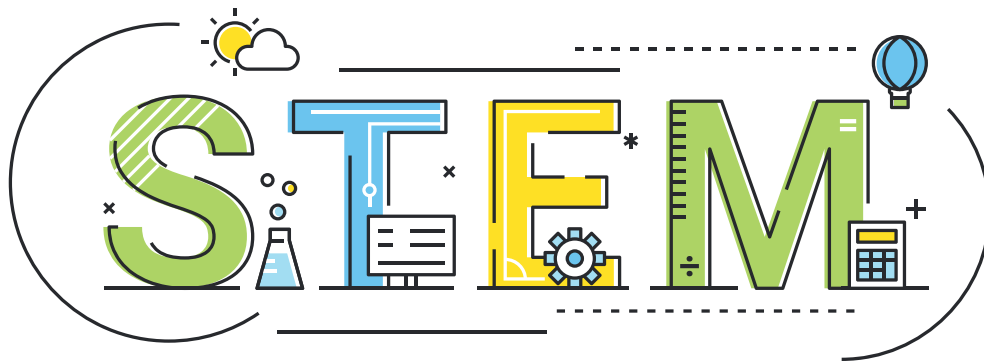
PLAY.

UBTECH

WHAT IS STEM?

STEM stands for science, technology, engineering, and mathematics. STEM is important because it pervades every part of our lives. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Engineering is the basic designs of roads and bridges, but also tackles the challenges of changing global weather and environmentally-friendly changes to our home. Mathematics is in every occupation, every activity we do in our lives. By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it and hopefully pursue a job in a STEM field. A curriculum that is STEM-based has real-life situations to help the student learn. Programs like Engineering For Kids integrates multiple classes to provide opportunities to see how concepts relate to life in order to hopefully spark a passion for a future career in a STEM field. STEM activities provide hands-on and minds-on lessons for the student. Making math and science both fun and Interesting helps the student to do much more than just learn.

WHY STEM

The Australian Government regards high-quality science, technology, engineering and mathematics (STEM) education as critically important for our current and future productivity, as well as for informed personal decision making and effective community, national and global citizenship .

The Government is committed to improving the STEM skills of young Australians to ensure that they have the skills they need to live and work in a globalised world.

Over $64 million allocated to fund early learning and school STEM initiatives under the Inspiring all Australians in Digital Literacy and STEM measure of the $1.1 billion National Innovation and Science Agenda.

- $1.5 million to support the delivery of Artificial Intelligence in Schools, under the Australian Technology and Science Growth Plan, as part of the $29.9 million Artificial Intelligence Capability Fund measure.

- $9.5 million for Mathematics Massive Open Online Courses (MOOCs) to strengthen the capacity of teachers across Australia to teach mathematics and numeracy through freely available, nationally coordinated, high quality professional learning and resources.

- $2.35 million for the extension and expansion of Curious Minds (STEM Summer Schools for Girls) over four years under the Women's Economic Security Package.

UBTECH

SCOREBOT

This kit includes everything you need to build a real shoot-and-score, interactive football robot. ScoreBot is designed to be your robotic football playing companion. The ScoreBot Kit is your exclusive champion shooting football robot which can be built, programmed and driven all by you!

3D APP BUILDING GUIDANCE DELIVERS HANDS ON FUN!

The visual aspect of building the ScoreBot Kit through the free JIMU App offers a fresh and immersive experience for both first time and experienced builders. The step by step instructions are easy to follow that makes the building process fun.

BUILD.   CODE.   PLAY.

UBTECH

UNICORN

Bring the magic of robotics home with the Mythical Series: UnicornBot Kit. This buildable, codable UnicornBot kit comes with everything needed to build and program your own magnificent unicorn. Activate the color sensor and smooth motion servos to make UnicornBot drive, dance, play and more. Kids can even program the brilliant LED horn with a wide selection of custom colors! UnicornBot is the perfect introduction to coding and programming for kids who love mythical creatures. Always inspiring creativity, the JIMU Robot system motivates kids to explore robotics and STEM learning. Smart Robots. Smarter Kids.

3D APP BUILDING GUIDANCE DELIVERS HANDS ON FUN!

The 3D app once downloaded onto your smart device will guide you through a step by step process to assemble the Robot. Then use the Scratch program to code and play.

BUILD.   CODE.   PLAY.

UBTECH

Create Your All-Star

COURTBOT

This kit includes everything you need to build either ShootBot, DunkBot, or DumperBot. Basketball to Football - CourtBot has you covered. With sports in its DNA, the CourtBot Kit provides you with endless fun, learning, and robotic competition with friends.

BLOCKLY CODING MADE EASY!

The blocked-based drag and drop programming editor lets users of all levels create custom programmed sequences. Program the robot to shoot, score, drive and more all using Blockly Coding.
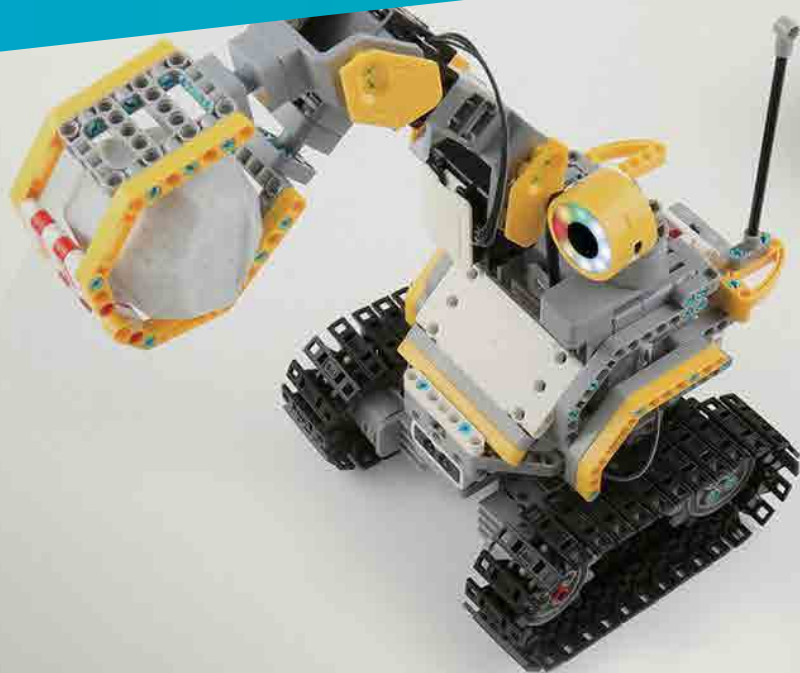
BUILD.   CODE.   PLAY.

UBTECH

TRACKBOT

This kit includes everything you need to builder either GrabberBot or DiggerBot - or build your very own JIMU Robot creation. The high speed motor ensures realistic, linear movement and the colorful LED light gives your robot a little personality that can show off different emotions based on what you program it to do.

3D APP BUILDING GUIDANCE DELIVERS HANDS ON FUN!

The visual aspect of building the TrackBot Kit through the free JIMU App offers a fresh and immersive experience for both first time and experienced builders. The step by step instructions are easy to follow that makes the building process fun.

BUILD.   CODE.   PLAY.

UBTECH

ASTROBOT

Blast off into a robotic galaxy to build one of three robots in the AstroBot Kit. This interactive, building block system takes creativity and learning out into the stratosphere! The AstroBot Kit comes with everything needed to create AstroBot, Rover, Astron or even your own creation. Program and code these robots to explore, move, and more with five smooth robotic servos, two LED eyes, a Bluetooth speaker, and an infrared sensor. AI-ways inspiring creativity, the JIMU Robot system motivates kids to explore robotics and STEM learning. Smart Robots. Smarter Kids.

3D APP BUILDING GUIDANCE DELIVERS HANDS ON FUN!

The 3D app once downloaded onto your smart device will guide you through a step by step process to assemble the Robot. Then use the Scratch program to code and play.

BUILD. CODE. PLAY.

UBTECH

WARRIORBOT

WarriorBot is an intelligent battle robot with leveled building and programing learning system, providing users with an in-depth understanding of science, math, physics, programming, and more through captivating gameplay modes and intelligent features.
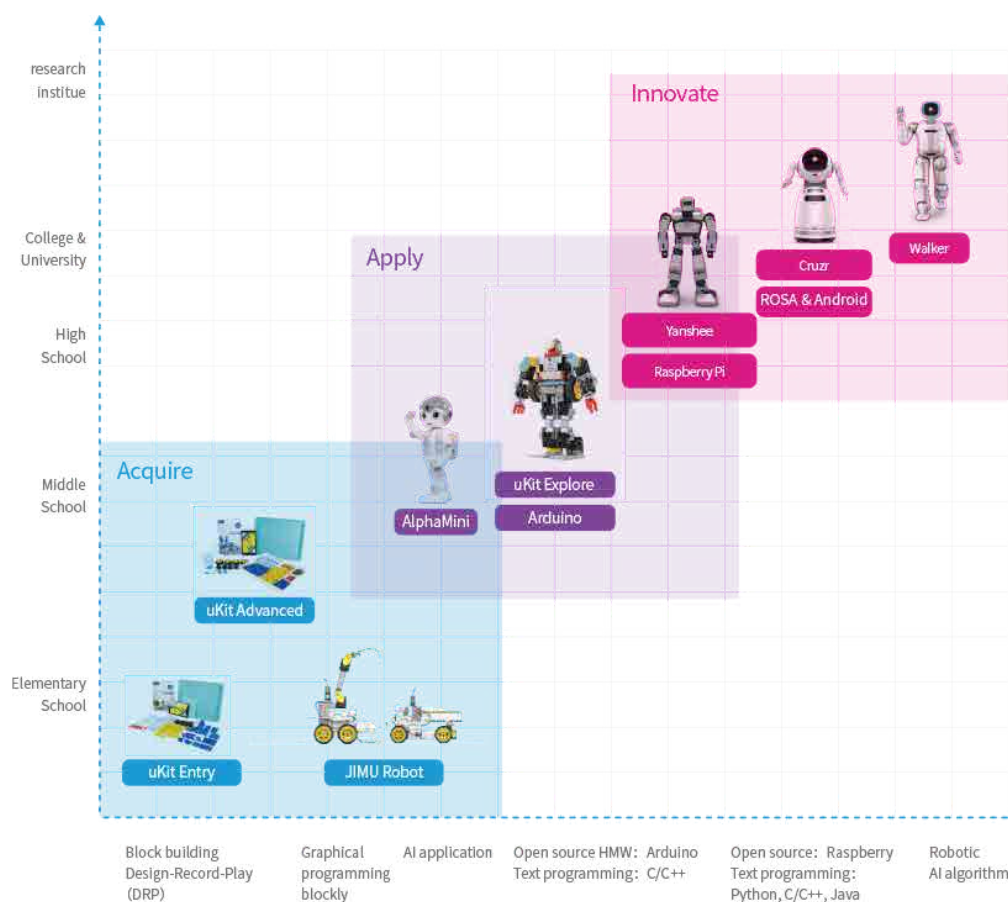
BUILD.   CODE.   PLAY.

UBTECH

Curriculum System and Teaching Tools

Research institute
College & University
High School
Middle School
Elementary School

Acquire — uKit Advanced, uKit Entry, JIMU Robot
Apply — AlphaMini, uKit Explore, Arduino
Innovate — Yanshee, Raspberry Pi, Cruzr, ROSA & Android, Walker

Block building Design-Record-Play (DRP) | Graphical programming blockly | AI application | Open source HMW: Arduino Text programming: C/C++ | Open source: Raspberry Text programming: Python, C/C++, Java | Robotic AI algorithms

Jimu robot

	SCOREBOT	TRACKBOT	COURTBOT	UNICORNBOT	ASTROBOT
Recommended Age	8+	8+	8+	8+	8+
Parts and Connectors	261	198	500+	440	387
Pre-Designed Characters	1	1	3	1	1
Special Features	1 UltraSonic Sensor	1 Infrared Sensor	1 UltraSonic Sensor	1 Color Sensor, 1 RGB Light-up Uni-corn Horn	2 LED Lights, Blue-tooth Speaker
Digital Servos	1	6	3	2	5
Blockly-Based Coding	✔	✔	✔	✔	✔
Compatible with JIMU Robot App	✔	✔	✔	✔	✔

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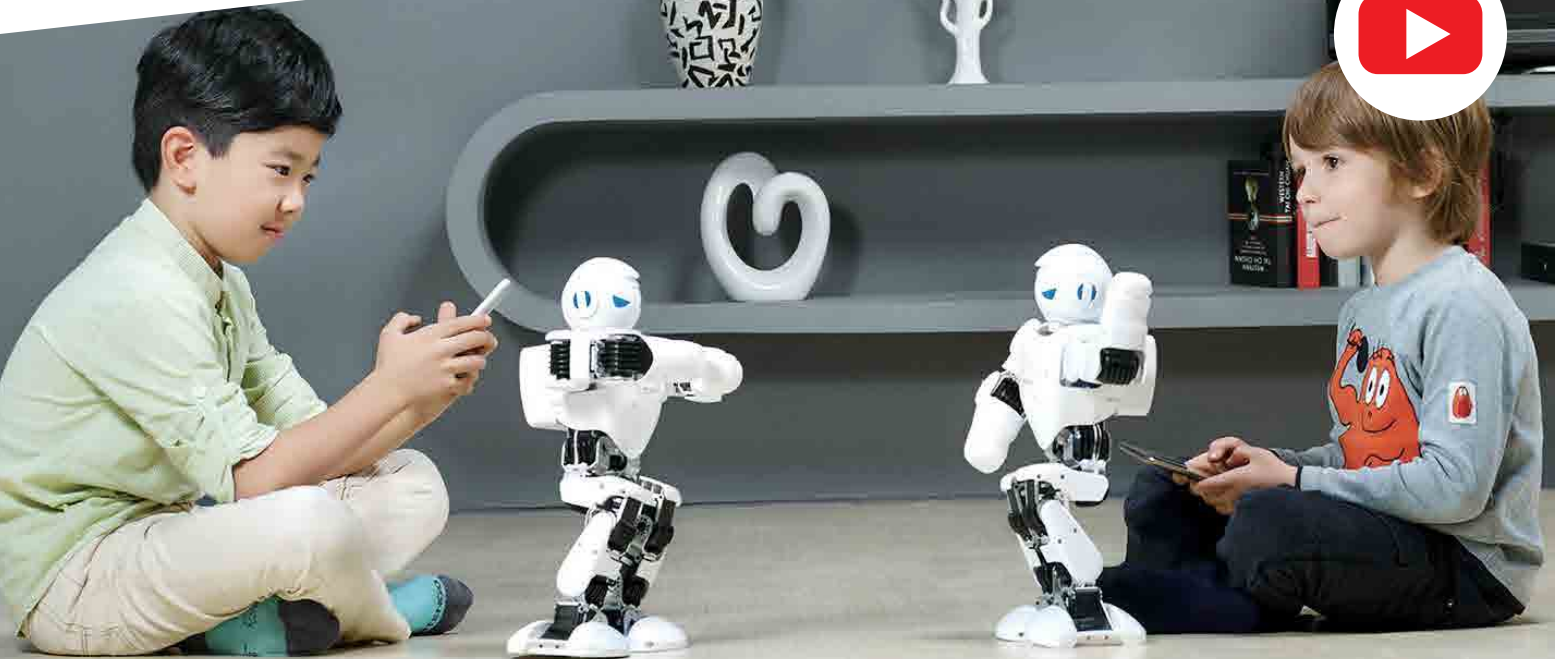
ALPHA 1 PRO

Alpha 1 Pro is a household programmable humanoid robot that can be used for education and entertainment. This robot has perfectly designed, high-precision servo joints, 3D visual programming software and PRP (Pose, Record & Playback) function are seamlessly controlled in one App. Alpha 1P's life-like human movements make it a member of the family.
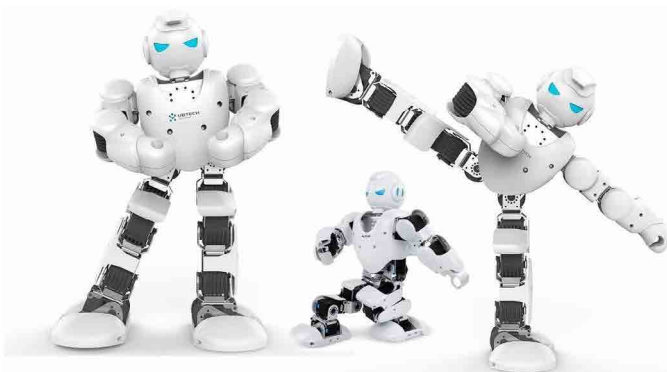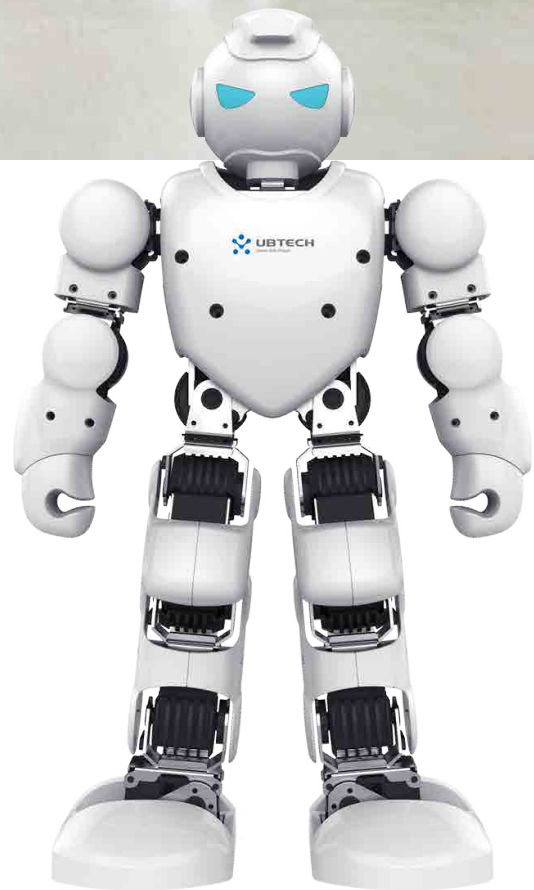
CODE.

PLAY.

UBTECH

ALPHAMINI

Your Intelligent Companion robot is here, ready to befriend, entertain, teach, and communicate in a wide variety of scenarios. Alpha Mini is highly portable, bringing fun interactions and a wealth of expressions and functionality, including voice interaction, 4G LTE connectivity, face recognition, illustrated book recognition, and object recognition. Fourteen servo motors power a variety of flexible movements, such as dancing, kung fu, and getting up after a fall, while the adorable LCD eyes can show emotion and expressions – making Alpha Mini feel like a true part of the family.
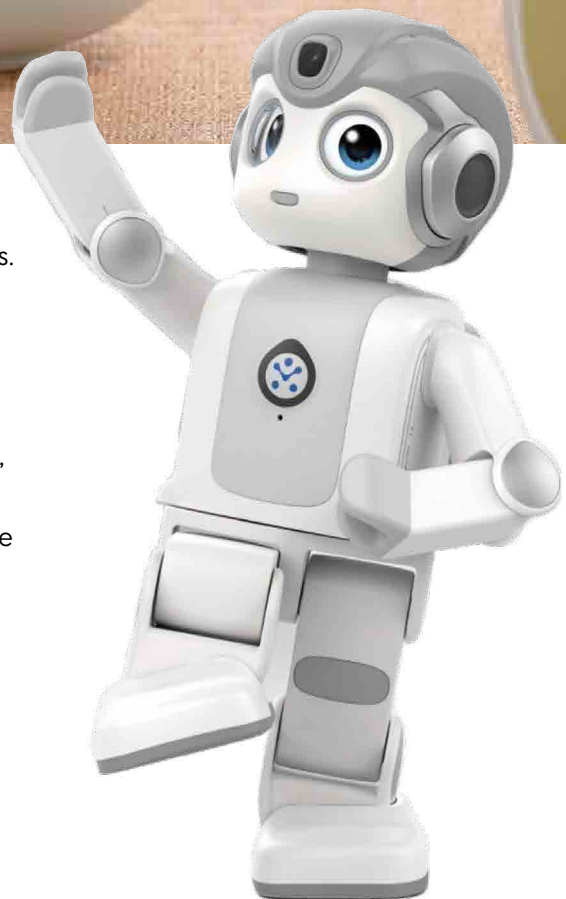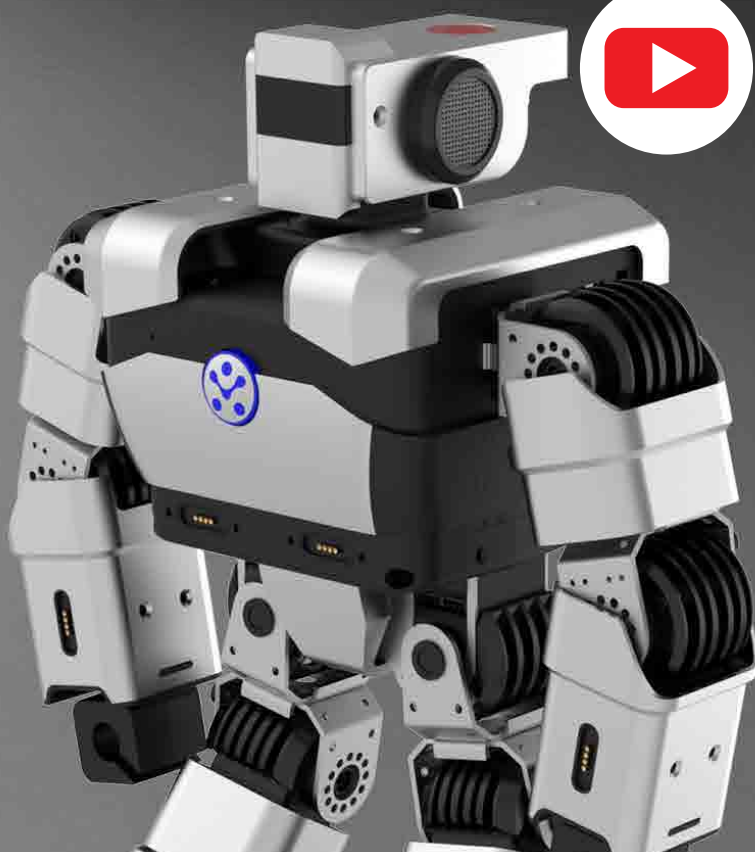
CODE.   PLAY.

UBTECH

YANSHEE

Yanshee is an ideal educational robot designed to provide the ultimate open-source platform for educators and students to learn, experiment, research and engage with.

Standing at nearly 15 inches tall, Yanshee combines an advanced AI interface, a programmable Raspberry Pi card, and a host of sensors and functionalities. All these enable Yanshee to perform tasks on command, test environmental conditions, speak, listen, thoughtfully answer questions, and relay data.

WHY AI ROBOTIC EDUCATION?

In the fourth industrial revolution, AI mindset and computer science skills are needed more than ever. AI talents will inevitably become the foundation of a country's AI development and the core power source be-hind competitions among countries. And now is the time to inspire them.

AI robot is the best carrier of AI technolo-gies. UBTECH robots can serve as a teaching assistant, student's learning companion as well as an essential teaching tool to make AI robotic curriculum work in the classroom.

DIVERSE CODING LANGUAGES

The open source nature of the platform means students can leverage multiple coding lan-guages – including C, C++, Python, Java and Blockly &Scratch– to collaborate and engage with Yanshee.
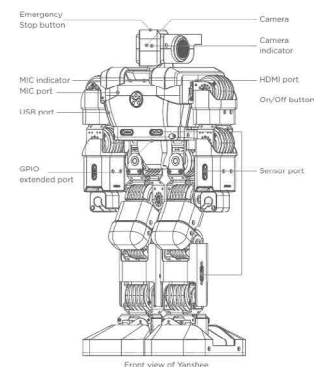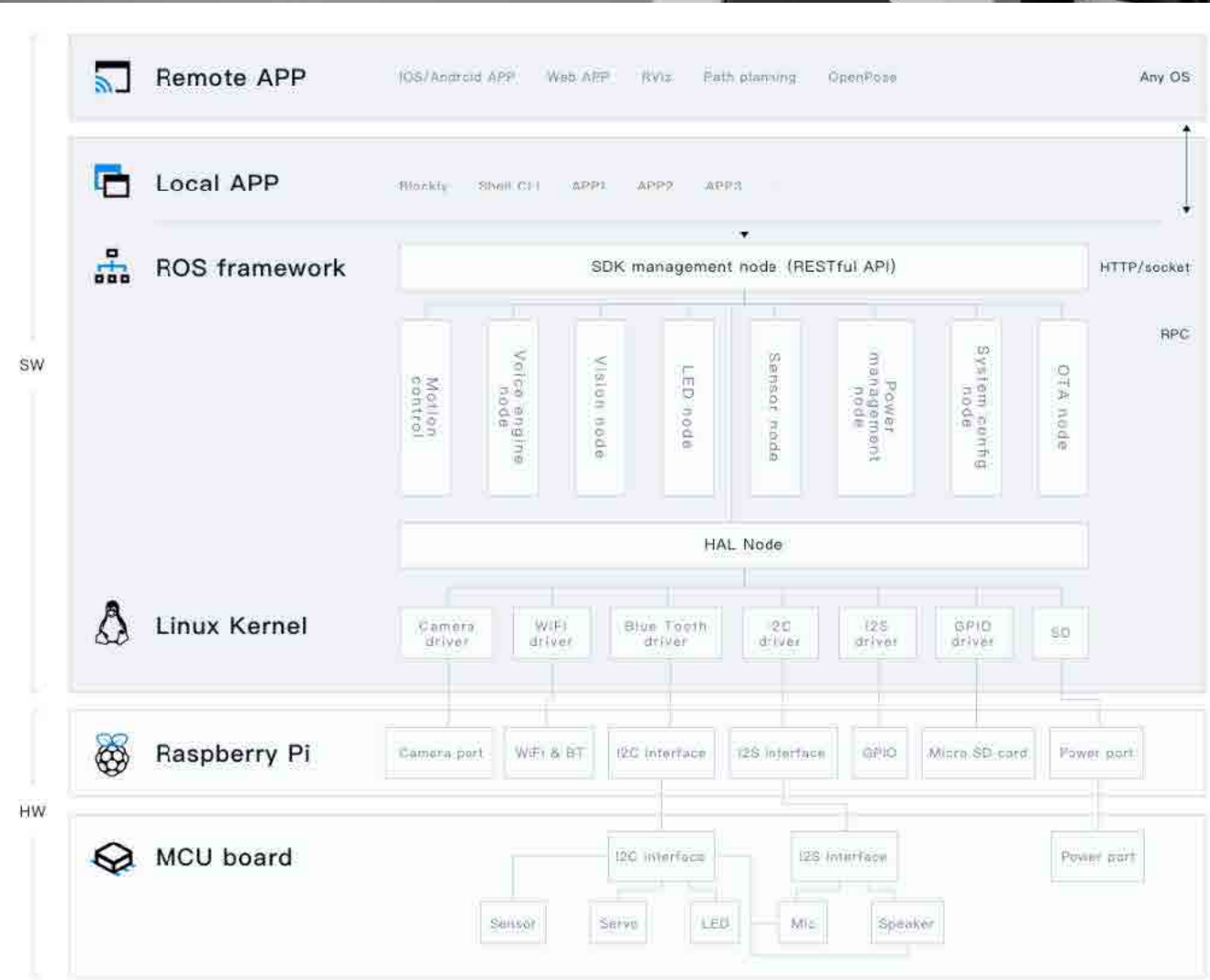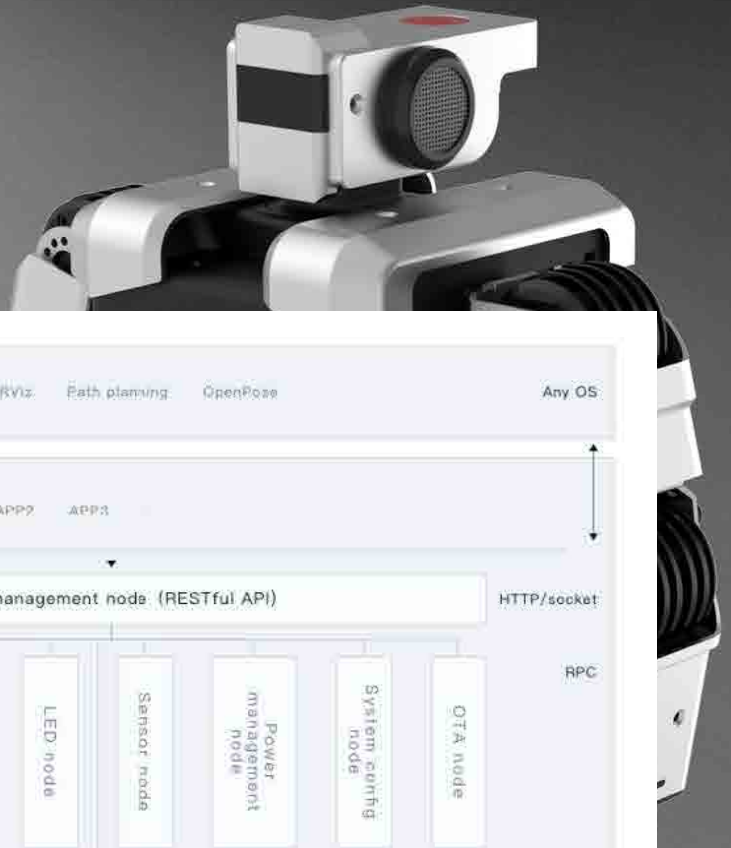
CODE.   PLAY.

UBTECH

YANSHEE

	Remote APP	iOS/Android APP	Web APP	RViz	Path planning	OpenPose		Any OS
	Local APP	Blockly	Shell CLI	APP1	APP2	APP3		

ROS framework — SDK management node (RESTful API) — HTTP/socket

RPC

Motion control | Voice engine node | Vision node | LED node | Sensor node | Power management node | System config node | OTA node

HAL Node

Linux Kernel — Camera driver | WiFi driver | Blue Tooth driver | I2C driver | I2S driver | GPIO driver | SD

Raspberry Pi — Camera port | WiFi & BT | I2C interface | I2S interface | GPIO | Micro SD card | Power port

MCU board — I2C interface | I2S interface | Power port

Sensor | Servo | LED | Mic | Speaker

SW

HW

Emergency Stop button
Camera
Camera indicator
MIC indicator
MIC port
HDMI port
On/Off button
USB port
GPIO extended port
Sensor port

Front view of Yanshee

CODE.   PLAY.