



Shafston

Robotic Education Centre

CRICOS Provider Code:03917H RTO Code:45694

AI & Robotics.

Half-day immersive.
Built for the next generation.

4 Hours

morning

30 Seats

small cohort

6 Modules

hands-on

Half Day

08:30—12:30

Built for the next generation.

An immersive half-day where you build, code,
and embody artificial intelligence.

01

Visible AI

See algorithms decide
and learn — for real.

02

Tangible Robots

Humanoids, VR, arms.
Everyone hands-on.

03

Takeaway Vision

Silicon Valley —
brought to your morning.



4 Hours

08:30—12:30

30 Seats

strict cohort

6 Modules

hands-on

Half Day

one stop

What is AI, really?

Artificial intelligence makes computers simulate human-like thinking, learning, reasoning, and decision-making. It's not science fiction — it's running in every app you opened today.

CV

Vision

Lets machines see — image recognition, face detection, self-driving perception.

NLP

Language

Lets machines listen and speak — ChatGPT, voice assistants, translation.

AI

Daily Life

Recommendation feeds, smart homes, AI medical imaging, photo clustering.

Three core senses.

Vision · Language · Decision

One kit. Three forms.

Build a robot dog, a wheeled rover, or a spider walker — your call. UGOT is a modular kit with onboard AI.



01

Modular Design

Same kit, endless forms — bionic mechanical structure.

02

Edge AI Compute

Onboard processing — no internet needed for vision and audio.

03

Sensing Suite

HD camera, mic array, gyro, range-finder — five robot senses.



Robot Dog



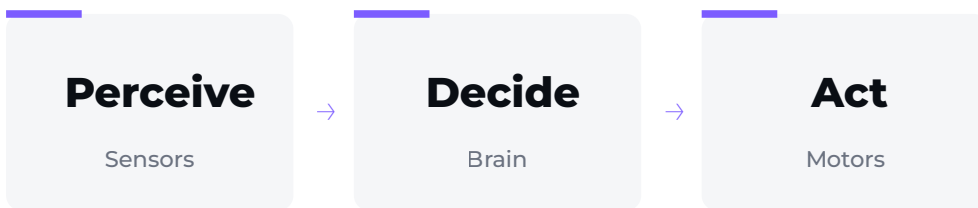
Rover



Spider Walker

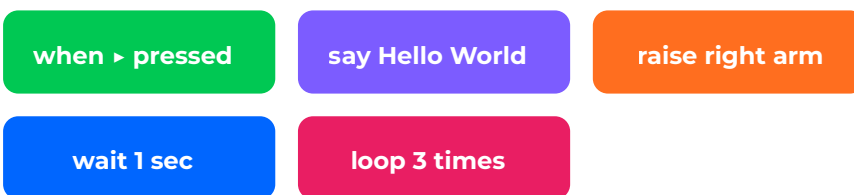
Bring it to life.

Yanshee — a programmable humanoid robot.
Sensors → controller → motors. Block-coded.



Block coding.

Block-based · like Scratch · zero lines of code.



Drag.
Drop.
Watch it dance.

0 lines of code required.

Put on the VR. Become the robot.

Embodied AI · Teleoperation · Unitree G1.



01

FPV

Stereo first-person view —
what you see is what it sees.

02

No Haptics

Judge grip with your
eyes alone —
pure visual control.

03

DoF Mapping

Your arm maps to G1's arm —
every motion translated.

Why this matters.

Researchers no longer teach robots by writing code — they put humans in VR. That's expert demonstration data. AI watches it 10,000 times, and learns.

Six axes. One hand.

A 6-DoF robotic arm and a multi-fingered dexterous hand — operated by you, learning from you.



01

6-DoF Spatial

Translate and rotate in 3D — any angle.

02

Dexterous Grip

Flick, twist, pinch — beyond 2-jaw grippers.

03

Data Harvest

Every grasp becomes AI training data.

Workflow.

You grasp



Data logged



AI learns



AI executes

How AI learns to do things.

Compress reality into days with NVIDIA Isaac Sim.

Imitation Learning

Show it once.

You demonstrate the task in VR. AI watches 10,000 times and copies you.

Reinforcement Learning

Reward & retry.

AI tries, fails, retries — + for success, - for failure. Finds the optimal policy.

1000x

Training speedup.

Years of real-world learning, compressed into days.

Morning.

08:30 — 12:30.

Core theme: Embodied AI & Applied Robotics.

01

The Perception Layer

08:30 — 09:30

60 min

- 15m Icebreaker — "Robot follows instructions"
- 30m Google Teachable Machine — train a computer to see
- 15m Theory + Ugot robotic dog demo

→ Grasp CV principles; experience embodied AI.

02

The Control Layer

09:30 — 10:30

60 min

- 35m Hardware — Ugot modular + Yanshee kinematics
- 25m Edge computing + block programming

→ Identify sensors, controllers, actuators; the loop.

△

Tea Break · Networking

10:30 — 11:00

30 min

03

The Execution Layer

11:00 — 11:40

40 min

- 15m Kinematics — Degrees of Freedom via human body
- 25m Robotic arm practicum — precision grasp challenge

→ Master 3D coordinate control; intuit dexterity.

04

The Learning Layer

11:40 — 12:30

50 min

- 15m Google AI Quests — data → model paradigm
- 25m Unitree G1 immersive VR teleoperation
- 10m Wrap-up · debrief · sharing

→ Grasp ML; understand Embodied AI; spark curiosity.

Is this for you?

For Whom

- 01 Shafston Int'l Students**
Hands-on STEM in English
- 02 Local High-Schoolers**
One morning to "get" AI
- 03 Ages 12–18**
Into VR / coding / robots
- 04 STEM Teachers**
Make abstract ideas tangible

What You Get

- CV Visible AI**
Grasp CV / NLP / decisions
- RBT Tangible Robots**
Build 3 form factors
- VR VR Teleoperation**
Embody G1 to grasp objects
- ML AI Mindset**
Imitation + reinforcement
- CRT Certificate**
For your applications

No coding background required. Just bring your curiosity. →

Save this morning for the future.

DURATION

4 hours

Morning 08:30—12:30

CAPACITY

30

Strict small cohort

DATE

Every **Week**

By enquiry





Shafston

Robotic Education Centre

CRICOS Provider Code: 03917H RTO Code: 45694

The future is here.

All it costs you is a morning.

CONTACT

Shafston Robotic Education Centre

ADDRESS 365 Saint Pauls Terrace, Fortitude Valley, QLD 4006

PHONE +61 (0)7 3249 4111

EMAIL info@shafston.edu