



AI Creatures Catch'em all! Workshop

**Ages 7–14 |
AI Game creation
Hands-on**

**DSA Portfolio Boost |
Duration: 2 hr**

Photo is for illustrative purposes, design varies according to actual product made by students.

A program of Applied Computational Intelligence Institute
Curriculum powered by the Explainable Intelligence™ Framework
with research support from the Cognitive Intelligence Lab



Another World Class Content by Cognitive Intelligence Lab

AI Creatures Catch Arena Workshop Build Games. Train AI. Think Like Engineers.

What if kids could control a game using their hands — and teach the computer how to respond? In this hands-on workshop, students don't just play a game.

They **build an AI-powered Creatures catching system** using machine learning, coding, and systems thinking — all within the Cognitive Systems Academy (CSA) framework.



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World Class Framework:

Cognitive Systems Academy™

Students learn to explain how their code and systems behave, like **Harvard (CS50) and MIT**, they don't start by memorizing syntax.

Curiosity, reasoning, and understanding always come first.



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Key Takeaways

DSA PORTFOLIO BUILD UP

- Each student receives a Digital DSA Portfolio
- DSA write-up, Testimonial & Evidence

Skill Sets:

Machine learning fundamentals

Coding logic

Systems thinking

Problem solving

Decision modelling

Explainable reasoning

Analytical Reasoning

Scientific, AI concepts

21st century skills competencies



What Makes This Workshop Different

Most coding classes teach:
drag blocks → game works

CSA workshops teach:
understand intelligence → build system → explain decisions

Students learn:
how AI learns from examples
how hand tracking works
how game rules control outcomes
how systems interact (AI + physics + rules + feedback)
This is **real AI literacy**, not just coding.

SHOW OFF!

Let's Show Off!

Present what you have built!

Student presentations to parents at Open House.

- 1) Introduce your team and name your design!
- 2) What does it do?
- 3) What are your roles?
- 4) How does it work?
- 5) Share one challenge you encountered during the build.
- 6) What is your solution?
- 7) Why Should we vote for you?

14 Years of Pioneering STEM Education & Robotics in Singapore

By creators of FLL Grand Champion

Award-Winning Curriculum

Developed by FLL Grand Champion Master Trainers.

Curriculum developed by experienced, award-winning robotics and computing educators, and refined through the **Explainable Intelligence™ Curriculum Framework** with research support from the *Cognitive Intelligence Lab*.



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COGNITIVE SYSTEMS ACADEMY™

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CODING. REIMAGINED.

Building Intelligence Through Systems Thinking & Explainable AI

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