

E1STM022C

<u>(Token- required)</u>

[Gifted Programme]
STEAM Course (Level I)

Al Vision Model with Real-World Data from Home Pets, Plants and Fishery

Representatives from Feelings Al



Intended Learning Outcomes

Result Release 22 Aug 2025

Upon completion of the gifted programme, gifted students should be able to:

- 1. demonstrate mastery of core concepts in Al and computer vision;
- 2. illustrate how neural networks and CNNs process images for predictions;
- 3. construct and train an AI vision model to classify images using curated data;
- 4. propose practical uses for AI systems that solve real-world problems, emphasizing the importance of sustainability and caring for the environment.

Gifted Programme Introduction

What if you could teach a machine to see and understand living creatures—just like you? In this course, students will step into the role of Al creators, building their own computer vision models focused on animals and life. By collecting images or videos of pets or animals they observe, students will train their AI to recognize and understand living beings—and even imagine how Al could watch over them, helping with health tracking, habit observation, or automated care. They'll also visit a lobster and vegetable farm to collect real-world data and learn how Al is used in agriculture, biology, and sustainability. From coding to creativity, students will explore how technology helps us better understand and care for life on Earth.

Get ready to combine curiosity, science, and Al-and see the living world through the "eyes" of a machine!

Schedule

Session	Date	Time	Venue (TBC)
1	15 Nov	1:00 p.m 4:00 p.m.	¹ PolyU campus
2	22 Nov	1:00 p.m 4:00 p.m.	¹ PolyU campus
3	29 Nov	1:00 p.m 5:00 p.m.	² Field trip
4	6 Dec	10:00 a.m 12:00 noon	¹ PolyU campus
5	6 Dec	1:00 p.m 4:00 p.m.	¹ PolyU campus

Remarks*:

- 1. Students must bring your own tablet or laptop to the class.
- 2. The instructor has already arranged a shuttle bus for pick-ups between PolyU and class venues. Evening classes will be dismissed at the PolyU. Details will be explained during the 1st class.

Suitable for

- P5 S3 HKAGE student members in 2025/26 school year. S.1-S.3 student members will be given the priority
- Class size: 30
- Student members would be selected randomly by the computer system. The decision of HKAGE on the result of the selection should be final.

Pre-requisite

No special prerequisites are needed

Medium of Instruction

Cantonese with Chinese handouts

Certificate

E-Certificate will be awarded to participantss who have:

- attended 4 sessions; AND
- completed all the assignments with satisfactory performance