



Constructing a Neural Network in Machine Learning

(E1MLG004C)

Introduction	From fundamental mathematics to simple Blockly coding, we will learn the most important theories behind artificial intelligence and machine learning. We will use one of the most prominent form of machine learning today, Neural Network, to explore the world of Machine Learning. Students will learn the theory of neural network through simplified linear algebra and some math games, construct their own neural network with Blockly codes and train their own network through data they generate.
Programme Type / Level	Computer Programming Course (Level I) (Token-required)
Instructor(s)	Mr. LAU Kam Ming (Smart Kiddo Education Limited)
Pre-requisite	No special prerequisites are needed
Target Participants	<ul style="list-style-type: none">➤ P4 to P6 HKAGE student members only in 2020/21 school year➤ Class size: 30
Medium of Instruction	English with English handouts
Certificate	E-Certificate will be awarded to participants who have: <ul style="list-style-type: none">❖ Attended at least 3 sessions; AND❖ Completed all the assignments with satisfactory performance
Intended Learning Outcomes	Upon completion of the programme, participants should be able to: <ol style="list-style-type: none">1. introduce artificial intelligence and machine learning;2. investigate what neural networks and its applications and limitations;3. equip students' with the computational thinking and ability to apply mathematical skills in solving real world problems.
Application Procedure	<u>This programme is Programmes with No Screening</u> There are no screening questions, written test or other screening methods for this type of programmes. <ul style="list-style-type: none">● Student members can select up to 5 programmes from a list of selection. Applicants have to state the priority when submitting the application. (1st priority, 2nd priority, 3rd priority, etc). 1 token is required for each programme (For programme list, please refer to the issue 20 of Gifted Gateway (click here));● Application can only be submitted once. Once it is submitted, the priority and the programme selection cannot be changed;● If a student member removes a programme from the application before the application deadline by withdrawal, the choice priority will remain unchanged. (For example: A student has selected three programmes and removed the programme with the 1st priority from the application. The choices of 2nd and 3rd priority will remain unchanged with no promotion in priority.);● We will select the students based on the student's choice of priorities and a randomly generated selection by the computer system. If there is time clash between the applied programme and other programmes with offer, HKAGE will consider if the application will be accepted;● Priority will be given to student members who have not completed the applied programmes;● Student members should avoid applying programmes with time clash;● The decision of HKAGE on the result of selection should be final.
Application Deadline	22 Oct 2020 12:00 n.n Application Result Release Date 30 Oct 2020
If student members withdraw from the programme after the Application Deadline, the token will be deducted.	

Schedule

Session	Date	Time	Venue (HKAGE)
1	28 Dec	9:30 a.m. – 12:30 p.m.	Room 105 Zoom Meeting
2		2:00 p.m. – 5:00 p.m.	
3	29 Dec	9:30 a.m. – 12:30 p.m.	
4		2:00 p.m. – 5:00 p.m.	

Enquiries

For enquiries, please contact Academic Programme Development Division on 3940 0101
After language selection, press "1".



SCIENCES

科學