



E2DAS001W

(Token- required)

Data Science Workshop (Level II)

Unlocking Data Secrets with Python and Learning STEM in Metaverse

Prof Yu Leung Ho Philip, Dr Singh Manpreet and other instructors
Department of Mathematics and Information Technology
The Education University of Hong Kong

Application Deadline

**14 Feb 2024
12:00 noon**

Intended Learning Outcomes

Upon completion of the programme, participants should be able to:

1. explain the popular data visualization and modeling techniques;
2. apply the data visualization and modelling techniques in learning STEM;
3. write simple programs with Python coding;
4. raise awareness of the virtual reality (VR) applications in Metaverse & STEM education;
5. discuss ethical issues in data science exploration and application.

Result Release

23 Feb 2024

◆ Introduction

“Data is a precious thing and will last longer than the systems themselves.”

– Tim Berners-Lee, inventor of the World Wide Web

“Without big data analytics, companies are blind and deaf, wandering out onto the web like deer on a freeway.”

– Geoffrey Moore, an American organizational theorist, management consultant and author

In this workshop, offered by HKAGE in collaboration with The Education University of Hong Kong (EdUHK), you will learn about data mining techniques and their applications in STEM Education together with virtual reality (VR) platforms. You will be taken on the step-by-step journey of the data mining process through a series of hands-on activities by Prof Yu Leung Ho, Philip and Dr. Singh Manpreet of the Department of Mathematics and Information Technology (MIT) of EdUHK.

This workshop will introduce popular data visualization and basic modeling techniques with hands-on python practices. It also will be dedicated to the use of virtual reality platforms (Metaverse) for doing STEM activities related to data mining accompanied by a visit to EdUHK’s Virtual Reality lab.

◆ Schedule

Session	Date	Time	Venue
1	4 May 2024 (Saturday)	10:00 a.m. – 1:00 p.m.	D3-LP-11 (Block D3 LP) The Education University of Hong Kong
2		2:00 p.m. – 5:00 p.m.	(Location)

◆ Target Participants

- S1 – S6 HKAGE student members in 2023/24 school year.
- Class size: 50
- 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/English with English handouts

◆ Certificate

E-Certificate will be awarded to participants who have:

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