

# Learningverse - A 3D Metaverse for Online Collaborative Learning

## Learningverse: 專為協作學習而設的3D元宇宙

### Principal Investigator 首席研究員

Dr Song Yanjie 宋燕捷博士

Department of Mathematics and Information Technology 數學與資訊科技學系

### Co-investigators 聯席研究員

Prof Philip Yu Leung-ho, Prof John Lee Chi-kin, Dr Fu Hong, Mr Wu Kaiyi, Mr Cao Jiaxin

楊良河教授、李子建教授、傅弘博士、巫鎧屹先生、曹家鑫先生

### Award 獎項



Learningverse is a 3D metaverse platform providing an immersive, interactive and collaborative environment for educational and training purposes. The platform allows users to generate avatars by mirroring themselves with facial expression, gesture and pose tracking on an ordinary computer with a webcam. It also allows users to select custom virtual tools for immersive experiential learning in both online and blended modes. Learningverse pioneers the educational metaverse, offering an innovative learning environment for users across different educational levels and contributes to technological developments for educational use.

Learningverse 是一個以教育及培訓為主的3D元宇宙平台，旨在為教育團體提供一個沉浸式、互動性和協作性高的學習平台。運用一台有鏡頭的電腦，這個新平台採用鏡像技術，根據用家面部表情、手勢和動作追蹤生成與自己相似的虛擬角色。切合實際需要，用家可以自由建造虛擬道具和學習場景來進行線上或混合模式課堂。Learningverse 為教育科技作出貢獻，引領教育界走進元宇宙，為不同學歷程度的用家提供一個新穎的學習模式。

### Features & Applications 特點和應用

- 01** Mirrors real users to generate personalised avatars  
以鏡像技術掃描用家人像並創建個人化虛擬化身
- 02** Provides custom tools to support user interaction and collaboration  
提供自定義工具，支援互動與團隊協作
- 03** Can be adapted to users across different educational levels, from kindergarten to tertiary for various subjects, interdisciplinary studies, training and cultural exchange programmes  
適用於不同教育程度的使用者，包括幼稚園至大學的不同科目、跨學科研究、培訓及文化交流計劃
- 04** Easy access to the metaverse without having to wear a VR headset with a low-threshold solution  
無需佩戴VR裝備即可進入元宇宙