

## Research Assistant I (Ref: 2500911) Department of Mathematics and Information Technology

## **Project Titles:**

- 1) Developing artificial intelligence agents in an immersive learning environment 'AGILE' to improve university students' academic presentation competency and self-directed learning;
- 2) Understanding cross-cultural preferences and acceptance of embodied AI Robot (eRobot) appearance, motion, and expressions for language learning;
- 3) Examining Social, Cognitive and Teaching Presences and Learning Outcomes in the Metaverse via an Intelligent Multimodal Learning Analytics Approach.

## [Appointment Period: 12 months]

The appointee will contribute to the development and enhancement of Virtual Reality (VR) and generative AI technologies, with a focus on developing immersive 3D learning scenarios within a metaverse environment. Additional responsibilities include conducting literature reviews, supporting data collection and analysis, and performing other project-related tasks as required.

Applicants should have a Bachelor's Degree, and preferably a Master's degree or higher in Educational Technology, Computer Science, Information Technology, Artificial Intelligence, or a related field. The prospective candidate should possess knowledge and skills in using Unity for 3D development to construct VR environments, including expertise in Unity Shader programming. Applicants should have hands-on experience in programming in Python or C#, and background knowledge in generative artificial intelligence. Candidates must demonstrate proficiency in at least two of the following technologies: Python Flask for web application development, HTML and JavaScript for front-end interfaces, WordPress for content management, Docker for containerized deployment, MySQL for database management, WebSocket or Server-Sent Events (SSE) for real-time communication, and Unity Shader for advanced VR rendering. They should be capable of independently developing functional modules, such as a WebSocket-based real-time data streaming system for a VR learning platform, to support the project's objectives in a fast-paced environment.

Applicants should have high proficiency in English and exhibit strong interpersonal and communication skills, enabling them to collaborate with interdisciplinary teams. The successful candidate will be detail-oriented, self-motivated, and able to work independently in a fast-paced environment.

For further enquiries about the post, please contact Prof Song Yanjie at ysong@eduhk.hk.

Salary will be commensurate with qualifications and experience.

Initial appointment will be made on a fixed-term contract. Fringe benefits include contract-end gratuity, leave, medical and dental benefits.

The University only accepts and considers applications submitted online for this post. Applicants should complete the <u>online application form</u> and upload a full CV on or before **25 September 2025.** Applications which are incomplete or without the required documents may not be considered. Personal data provided by applicants will be used for recruitment and other employment-related purposes. For details of the Personal Information Collection Statement, please refer to <a href="http://www.eduhk.hk/jobsopp/index.php?glang=en">http://www.eduhk.hk/jobsopp/index.php?glang=en</a>.

All applications will be treated in strict confidence. Only those who are shortlisted will be contacted. The University reserves the right not to fill the position(s) advertised. Since the incumbent's work would involve contacts with persons aged under 18 and/or mentally incapacitated persons, prospective employee(s) will be required to undergo Sexual Conviction Record Check operated by the Hong Kong Police Force.

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Further information about the University is available at http://www.eduhk.hk.

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