

Junior Researcher Mentoring Programme

2023

Code:	JRMP2023_01
School / Department:	Department of Logistics and Maritime Studies
Name of Research Team Member(s):	Dr Anthony Pang, Associate Professor and Associate Head Dr Tang Yuk Ming, Senior Teaching Fellow (ISE) Dr Johnny Wan, Teaching Fellow
Research Topic:	Build VR CAVE Scenarios for Teaching Warehousing and Operations Management Subjects
Short Description of the Research Project:	<p>The goal of this project is to develop a new cross-discipline virtual learning environment (VLE) which can be implemented in one Industrial and Systems Engineering (ISE) subject and one Logistics and Maritime Studies (LMS) subject related to logistics or aviation. The VLE will be installed in ISE and LMS VR CAVE labs. VR CAVE applies immersive VR technology. By projecting images on the walls and the floor of a room, multiple users can experience a 3D interactive environment with 3D glasses. This VLE will be an innovative, experienced-based and effective learning tool because it enables users to learn interactively with their senses. The project is guided by the 5-phase ADDIE approach for instructional design, including Analysis, Design, Development, Implementation and Evaluation. The VLE is aimed at meeting four objectives:</p> <ol style="list-style-type: none"> (1) deliver VR-supported learning experience to students; (2) enhance students' learning effectiveness; (3) improve teaching quality by including tech-based elements; and (4) achieve specific subject learning outcomes.

	The student researchers will be involved in creating scenarios to simulate the operations in a warehouse or other environments for the teaching of operations management or warehousing management subjects. They will also help to do a feasibility study on how VR technology can facilitate effective learning in the higher education sector.
No. of Places Offered:	3
Frequency of Meetings:	Bi-weekly
Special Requirement(s):	The participating students should have basic programming knowledge.

** The information presented above is subject to change.*