# LSGIPUBLIC SEMINAR

### Mixed Reality, Eye tracking and More

11 DEC 2024 (WED)
4:30 - 5:30 PM
Y302, POLYU
ENGLISH Seni

## Dr Bing LIU

Senior Human Factor Research Engineer PR China

#### ABSTRACT

Augmented reality (AR) technology has introduced numerous conveniences and exciting possibilities, transforming how people perceive and interact with the real world. This study examines the potential for enhancing users' spatial knowledge acquisition during navigation through a series of subjective and objective tests. Additionally, eye-tracking technology, employed here for quantitative testing, plays a crucial role in various human-machine interaction (HMI) studies. This report also highlights the advancement and application of quantitative human-factor testing methods, including eye-tracking, within the industry.

#### BIOGRAPHY

Dr. Bing Liu is currently an HMI engineer in the automotive industry, based in Shenzhen, China. She earned her Ph.D. in 2022 at the Chair of Cartography, Technical University of Munich, with a focus on "Spatial Learning with Mixed Reality." Her research explored the interplay between mixed reality technology, users, and the environment during navigation. Dr. Liu brings extensive expertise in spatial cognition, with experience utilizing advanced tools such as eye-tracking and fMRI. She also holds a bachelor's and master's degree from Beijing Normal University, where she cultivated her foundational knowledge in her field.

#### **Moderator: Dr Xintao LIU, LSGI**

All are welcome! Please register now to join us on-site!

Enquiry: Mr Jimmy Kwan | Tel: (852) 2766 4350 | Email: jimmy.lh.kwan@polyu.edu.hk







THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學



DEPARTMENT OF LAND SURVEYING AND GEO-INFORMATICS 土地測量及地理資訊學系