

# DISTINGUISHED LECTURE SERIES 2023/24

## UNDERSTANDING NON-VERBAL COMMUNICATION: DECODING FACIAL EXPRESSIONS AND GESTURES FOR SEAMLESS HUMAN-ROBOT INTERACTION

**19 FEB 2024 (MON)**  
**10:00-11:00 AM (HKT)**

WLB 210, The Wing Lung Bank Building for  
Business Studies, Shaw Campus, HKBU

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### Abstract:

As robots become more prevalent in our daily lives, their ability to understand and respond to human communication is becoming increasingly important. While natural language processing (NLP) has enabled robots to capture human intentions from verbal communication, understanding non-verbal cues such as facial expressions and gestures remains a challenge. However, these non-verbal channels are crucial for conveying user intention to robots, especially for human-centered robotics. In this talk, I will explore the roles of non-verbal channels in human communication, which provide additional information to emphasise key points and express attitudes. I will also discuss recent efforts in understanding facial expressions and gestures, both conscious and unconscious, to improve the interaction efficiency between humans and robots.

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