

## **HKUST ECON Seminar**

8 April, 2026, 3:00 – 4:30 pm

### **The Economic Implications of Map Distortion: Evidence from the Housing Market**

Prof Cheng Keat Tang, Nanyang Technology University

#### **Abstract:**

This paper quantifies the economic implications of London transit map distortion using the housing market. To contain the sprawling rail network within a single map resulted in a highly distorted map that draws stations further from one another when they are, in fact, close to one another, and vice versa. We observe that these distance distortions influence home buyers' perception of proximity. Every 1km increase in distortion that portrays the nearest station to be further from (nearer to) the economic nodes led to a 1.40% decrease (increase) in housing values. Technology, specifically the introduction of Google Maps Mobile, was able to correct around 40% of the mispricing driven by the distortion on the London Tube Map. This corresponds to a correction of approximately £8 billion, suggesting that technology plays an important role in providing accurate information for optimal decision-making.