## THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Information Systems, Business Statistics and Operations Management

## IS SEMINAR ANNOUNCEMENT



Technology Increases Labor Supply by Automating and Deskilling Tasks

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Prof. Ivan PNG
Distinguished Professor, National University of Singapore

DATE 22 October 2025 (Wednesday)

TIME 10:30 am - 12:00 noon

VENUE 4/F Meeting Room (Room 4047), LSK Business Building

## **ABSTRACT**

As societies age, they face shortages of labor. Typically, technology is thought of as addressing the challenge by increasing productivity and hence reducing the demand for labor. Less well known is that technology can help by increasing the supply of labor. In a vignette experiment among supermarket cashiers, we show that automating the payments task reduced the compensating differential for the cashier job. In a field experiment, we find that ride-hail drivers were more likely to accept a driving task if they were allowed to use map apps. Importantly, the experiment held earnings constant, and so the drivers' choice depended only on the amenity afforded by the technology. To the extent that technology benefits workers, it relieves pressure on wages.

## **BIOGRAPHY**

Ivan Png is Distinguished Professor at the National University of Singapore. He studies the economics of productivity and innovation, with recent papers in the Strategic Management Journal, Management Science, and Proceedings of the National Academy of Sciences. He is the author of Managerial Economics, which has been published in multiple editions. For leisure, he plays tennis with colleagues and the violin (both poorly).