

HKUST ECON Seminar

12 May, 2026, 3:00 – 4:30 pm

A.I. in the Office and the Factory: Evidence from Administrative Software Registry Data

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Abstract:

What is the effect of artificial intelligence (AI) on employment and wages? Using administrative data on a comprehensive set of AI applications developed in Brazil, I show that AI is widely used not only in administrative tasks but also in the production setting, where it primarily supports process optimization and quality control. Exploiting exogenous variation in AI development costs, I find that AI affects administrative and production workers differently. In the office, AI automates tasks, decreases employment, and hollows out the wage distribution. In the factory, it increases employment of low-skilled and young workers by enabling them to perform complex tasks that previously required expertise. Overall, AI increases employment in Brazil because the gains in production outweigh the losses in office work.