CFPR SEMINAR SERIES (AUG - NOV 2024)

OF JOBS AND MEN: AN AI-ASSISTED APPROACH FOR STUDYING SKILLS MISMATCH IN HONG KONG



11th October 2024 12PM - 1PM (SGT) (ZOOM)



Session chaired by:

Dr. Mu Zheng (CFPR Steering Committee Member & Department of Sociology and Anthropology)

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Recent advancements in generative AI and natural language processing have significantly enhanced the ability of social scientists to analyze large-scale observational data. In this study, I employ ChatGPT to process millions of online job postings in Hong Kong, for the purpose of assessing real-time labor market demands and constructing skills mismatch measures. This Al-assisted approach surpasses the limitations of traditional machine learning methods that require manual data labeling, a process that is time-consuming, labor-intensive, and cognitively demanding. The study demonstrates that general foundation models like GPT-4 can handle job posting data impressively without explicit pre-training. Notably, GPT-3.5, when fine-tuned, achieves close to GPT-4-level performance on automated data labeling and skill identification benchmarks, at just one-tenth of the cost. The study suggests that large language models can attain state-of-the-art performance on information extraction and classification tasks, outperforming smaller supervised models and even well-trained human experts in terms of efficiency and accuracy.

OUR SPEAKER



Dr. XU Duoduo is an Assistant Professor of Sociology and the Associate Director of the Social Science Research Center (SSRC) at the University of Hong Kong. Dr. Xu received her PhD in Social Science from the Hong Kong University of Science and Technology in 2017. Her research lies at the intersection of urban sociology, sociology of education, and sociology of work, and primarily focuses on child development and youth employment issues in Chinese cities.