

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Information Systems, Business Statistics and Operations Management

IS SEMINAR ANNOUNCEMENT



How Does In-Platform AI Reshape Social Search?

by

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DATE	21 October 2026 (Wednesday)
TIME	09:30 - 11:00 am
VENUE	4/F Meeting Room (Room 4047), LSK Business Building

ABSTRACT

Generative AI search that synthesizes a direct answer and displays AI overview (AIO) above the organic search results has been increasingly incorporated into search engines, including the search channels of social media platforms, which serve as social search engines for authentic user-generated content. On social media, engagement traditionally depends on two salient signals: content position, determined by platform ranking, and popularity metrics, reflecting social endorsement. By satisfying informational needs before users browse organic results while offering limited social proof, AIO may alter users' reliance on both signals. This study investigates how users redistribute their attention across search stages and across organic content under AIO, drawing on rich search log data from a natural experiment on a leading social platform. To identify query-level causal effects, a doubly robust machine learning (DML) approach is deployed to control for high-dimensional confounders constructed from both structured query features and textual content. We find that AIO induces substantial substitution, lowering the probability of clicking any organic post by 32%. Among users who continue searching, the AI overview redistributes clicks toward the most popular content. With estimates from a structural search-discovery model, we find AIO doubles the weight users place on popularity metrics, decreases user incentive to discover more posts while flattening the position gradient in the discovered set. Counterfactual ranking simulations further reveal that engagement-maximizing policies should differ by search mode: relevance drives optimal rankings in conventional search, whereas popularity becomes more important when AIO is displayed. The study advances understanding of generative AI as a mechanism that jointly shapes search continuation, content discovery, and within-list choice, with implications for platform ranking design and for creators seeking visibility as AI increasingly intermediates the search journey.

BIOGRAPHY

Shuang Gao is a final-year Ph.D. candidate in Computer Information Systems at the W. P. Carey School of Business, Arizona State University. Her research centers on emerging technologies for information provision in digital platforms, focusing on two questions: (1) how technology integration augments and mediates existing information to reshape user behavior, including users' search navigation, purchase decisions, and belief updating; and (2) how platforms should adopt and design technologies for responsible use, under data sharing restrictions and misinformation regulation. Methodologically, she draws on a diverse toolkit that includes econometrics, structural models, causal machine learning, and randomized experiments to address real-world research questions. Her studies provide actionable insights for platform strategy, information design, and technical solutions of responsible and trustworthy AI systems. She is a finalist for the 2026 INFORMS Social Media Analytics Student Competition.