The Hong Kong University of Science and Technology

Seminar on Business Data Science

Department of ISOM

Stance Drift: How AI-Mediated Communication

by
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Date: 13 May 2026 (Wednesday)
Time: 11:00am – 12:00nn
Venue: Room 4047 (LSK Business Building)

Abstract

Large language models (LLMs) increasingly mediate human communication, from drafting emails to summarizing scientific reports, yet whether they faithfully preserve a speaker's position remains largely untested. We modeled AI-mediated communication as a two-step pipeline in which one LLM generates an argument from a specified stance and another extracts the stance from that argument. Across 112 debate propositions, 9 mainstream LLMs, and 5 variants, no model preserved the original stance more than 70% of the time. Patterns of failure include polarization, deviation from neutrality, and stance flipping. These results expose a fundamental fidelity gap in AI-mediated communication, with direct implications for journalism, policy deliberation, and most domains where opinion-laden messages pass through language models.

Bio

Prof. Tong is a Professor of Innovation and Information Management and a Professor of Economics. His research focuses on statistical and machine-learning methods, social and economic networks, AI ethics, and the intersection of AI and social sciences. Notably, he has developed a series of works on Neyman-Pearson classification, addressing asymmetric error importance in applications such as medical diagnosis, loan approval, and cybersecurity. More recently, his research examines the societal impact of AI development. He currently serves as an Associate Editor for the Journal of the American Statistical Association and the Journal of Business & Economic Statistics.

Professor Tong earned a B.S. in Mathematics with high distinction from the University of Toronto and a Ph.D. in Operations Research from Princeton University, where his dissertation received the Zellner Award in Business and Economic Statistics from the American Statistical Association. He has served as an instructor in MIT's Department of Mathematics and as a tenured faculty member at the University of Southern California.

All interested are welcome!
For details, please contact ISOM Department.