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## WHEN SOCIAL SCIENCE MEETS COMPUTER SCIENCE...

Webinar of Computational Social Science Laboratory (CSSL@CUHK)

# Using LLMs for Computational Social Science: Challenges and Opportunities

17 December 2024 (Tuesday), 12:00 - 13:30 (UTC+8, HKT)

### Abstract

Large language models (LLMs) have created unprecedented opportunities for analyzing and generating language data on a massive scale, which has the potential to transform the field of social sciences since language data play a central role in all areas. In this talk, we present a road map for using LLMs as computational social science tools. To do so, we first analyze the zero-shot performance of more than 10 LLMs on a wide range of representative computational social science benchmarks. Then, we show how such findings about social constructs might be generalized to audio beyond text and increase the efficiency of social science analysis. Finally, we outline a few major concerns about the application of LLMs to social sciences, and make recommendations for investments that may help to address them.



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### Biography

Diyi Yang is an assistant professor in the Computer Science Department at Stanford University, also affiliated with the Stanford NLP Group, Stanford HCI Group and Stanford Human Centered AI Institute. Her research focuses on human-centered natural language processing and computational social science. She is a recipient of Microsoft Research Faculty Fellowship (2021), NSF CAREER Award (2022), an ONR Young Investigator Award (2023), and a Sloan Research Fellowship (2024). Her work has received multiple paper awards or nominations at top NLP and HCI conferences.



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