

Webinar of Computational Social Science Laboratory (CSSL@CUHK)

Understanding Online Attention: From Item Popularity to Market Landscapes

24 January 2024 (Wednesday), 16:00 - 17:30 (UTC+8, HKT)

Abstract

What makes a video popular, what drives collective attention online, what are the commonalities and differences between clicks and transactions in a market? This talk aims to answer these three questions. We will first discuss a physics-inspired stochastic time series model that explains and forecasts the seemingly unpredictable volumes of views over time. This affords novel metrics for forecasting expected popularity gain per share, and sensitivity to promotions. We will then describe novel measurement studies and machine learning models for a network of online items driving attention to each other. Lastly, we will introduce a macroscopic view of attention, which affords mathematical descriptions of market equilibriums and distributed optimisation. These results form the foundations of our ongoing work in the computational view of attention markets and potential mechanisms for encouraging a healthy online ecosystem.



Prof. Lexing Xie
Professor of Computing
The Australian National University

Biography

Lexing Xie is Professor of Computing at the Australian National University, she directs the ANU Computational Media lab (<http://cm.cecs.anu.edu.au>) and the Humanising Machine Intelligence Grand Challenge (<https://h-mi.anu.edu.au>). Her research is in machine learning on the social web, intersecting with computational social science, optimisation and computational economics.



Webinar Links



CSSL@CUHK