David Mingfei Liu

Contact Information

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Education

Northeastern University (2020 - Present)

Ph.D. Student, Computer Science Department and Network Science Institute

Advisor: Professor Tina Eliassi-Rad

Focus areas: Fairness in Machine Learning, Computational Social Science, and

Computational Reproducibility.

Princeton University (2018)

B.S.E in Computer Science with Certificate in Statistics and Machine Learning

Graduated summa cum laude

Undergraduate Advisor: Professor Matthew J. Salganik

Publications

David Liu, Zohair Shafi, William Fleisher, Tina Eliassi-Rad, and Scott Alfeld. 2021. RAWLSNET: Altering Bayesian Networks to Encode Rawlsian Fair Equality of Opportunity. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society (AIES '21)*. [pdf]

David Liu and Matthew J. Salganik. Successes and struggles with computational reproducibility: Lessons from the fragile families challenge. *Socius*, 5:1–21, 2019. [pdf]

Posters

David Liu. Uncovering the Evolution of Mukbang Videos on Youtube. The 7th International Conference on Computational Social Science (IC2S2), Virtual Conference, July 2021.

David Liu. Uncovering the Evolution of Mukbang Videos on Youtube. *Networks* 2021: A Joint Sunbelt and NetSci Conference, Virtual Conference, July 2021.

Industry Experience

Bloomberg LP - Software Engineer

Jul 2018 - Sep 2020

Implementing scalable, reliable C++ services on a derivatives market data team with a focus on message queueing, automated testing, and interface design.

The New York Times - Software Intern

Summer 2017

Architected backend supporting the renovation of the "My Account" page of the New York Times, increasing site usability. Renovated site launched in October 2017. Initiated side project with the NYT Data Science team, improving visualization of readership data from embedded static files to native, interactive Google Charts.

Awards and Honors

2021 NSF Graduate Research Fellowship

2018 Sigma Xi Nomination

Activities

2020 ML Reproducibility Challenge, participant.

2017 Undergraduate Peer Academic Advisor, Princeton University

2016 Undergraduate Computer Science Lab Teaching Assistant, Princeton University

David Liu 1 May 2021

Invited Talks

- 2021 MD4SG Working Group on Discrimination in Algorithmic Decision-
- making, Invited Speaker. Online. RabbitMQ Summit, Keynote Speaker. *Growing a farm of rabbits to scale* 2019 financial applications. London, UK. Fragile Families Challenge Scientific Workshop, Invited Speaker. Princeton,
- 2016

David Liu 2 $\mathrm{May}\ 2021$