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]

Non-Peer Reviewed Essays

David Liu and Sarah Sakha. Power: The exclusionary costs of large-scale computing. In *A New AI Lexicon* by The AI Now Institute. [link]

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

David Liu 1 October 2021

2021 Subtle CSCW Traits: Tensions around Identity Formation and Online Ac-Activities tivism in the Asian Diaspora, workshop participant. 2020 ML Reproducibility Challenge, participant. 2021 MD4SG Working Group on Discrimination in Algorithmic Decision-**Invited Talks** making, Invited Speaker. Online. RabbitMQ Summit, Keynote Speaker. Growing a farm of rabbits to scale 2019 financial applications. London, UK. 2016 Fragile Families Challenge Scientific Workshop, Invited Speaker. Princeton, NJ. AIES '21 Student Volunteer **Academic Service** NeurIPS '21 Student Volunteer

David Liu 2 October 2021