

David Mingfei Liu

Contact Information

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Education

Northeastern University (2020 - Present)
Ph.D. Candidate, Computer Science
Khoury College of Computer Sciences and Network Science Institute
Advisor: Professor Tina Eliassi-Rad

University of California, Berkeley (Fall 2022)
Simons Institute Visiting Graduate Student
Program on Graph Limits and Processes on Networks: From Epidemics to Misinformation

Princeton University (2018)
B.S.E in Computer Science with Certificate in Statistics and Machine Learning
summa cum laude
Undergraduate Advisor: Professor Matthew J. Salganik

Publications

Agapi Rissaki*, Bruno Scarone*, **David Liu**, Aditeya Pandey, Brennan Klein, Tina Eliassi-Rad, and Michelle A. Borkin. 2022. BiaScope: Visual Unfairness Diagnosis for Graph Embeddings. *Symposium on Visualization in Data Science at IEEE VIS (VDS '22)*.

David Liu*, Priyanka Nanayakkara*, Sarah Sakha, Grace Abuhamad, Su Lin Blodgett, Nicholas Diakopoulos, Jessica Hullman, and Tina Eliassi-Rad. 2022. Examining Responsibility and Deliberation in AI Impact Statements and Ethics Reviews. In *Proceedings of the 2022 AAAI/ACM Conference on AI, Ethics, and Society (AIES '22)*. [\[pdf\]](#)

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. [\[pdf\]](#)

Preprints

David Liu and Tina Eliassi-Rad. 2022. Identifying and Mitigating Instability in Embeddings of the Degenerate Core. [arXiv:2205.10647](https://arxiv.org/abs/2205.10647)

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 and Tina Eliassi-Rad. Increasing the Stability of Embeddings of the Degenerate Core. <i>The 2022 International Conference on Network Science (NetSci)</i> , Virtual Conference, July 2022. (oral presentation)	
	David Liu . Uncovering the Evolution of Mukbang Videos on Youtube. <i>The 7th International Conference on Computational Social Science (IC2S2)</i> , Virtual Conference, July 2021.	
	David Liu . Uncovering the Evolution of Mukbang Videos on Youtube. <i>Networks 2021: A Joint Sunbelt and NetSci Conference</i> , Virtual Conference, July 2021. (poster presentation)	
Industry Experience	Meta AI (FAIR) - <i>AI Research Intern</i>	May 2022 - Aug 2022
	Paper forthcoming on demographic-free group fairness Supervisor: Maximilian Nickel	
	Bloomberg LP - <i>Software Engineer</i>	Jul 2018 - Sep 2020
	The New York Times - <i>Software Intern</i>	Jun 2017 - Aug 2017
Awards and Honors	2021	NSF Graduate Research Fellowship (GRFP)
	2018	Sigma Xi Nomination
Activities	2021	Subtle CSCW Traits: Tensions around Identity Formation and Online Activism in the Asian Diaspora, workshop participant.
	2020	ML Reproducibility Challenge, participant.
Invited Talks	2021	MD4SG Working Group on Discrimination in Algorithmic Decision-making, Invited Speaker. Online.
	2019	RabbitMQ Summit, Keynote Speaker. <i>Growing a farm of rabbits to scale financial applications</i> . London, UK.
	2016	Fragile Families Challenge Scientific Workshop, Invited Speaker. Princeton, NJ.
Academic Service	AIES '22	Program Committee
	AIES '21	Student Volunteer
	NeurIPS '21	Student Volunteer