NAINA BALEPUR PH.D. CANDIDATE

nainab2@illinois.edu http://nainasb.github.io

EDUCATION

University of Illinois Urbana-Champaign

Urbana, IL

Ph.D. in Computer Science

2020 - 2026 (expected)

• Advisor: Prof. Hari Sundaram

• Research area: Social network analysis and applied game theory

University of Pittsburgh

Pittsburgh, PA

B.S. in Applied Mathematics, B.A. in Philosophy

2016 - 2020

• Minor in Computer Science

PUBLICATIONS

- 1. Aditya Karan*, Naina Balepur*, and Hari Sundaram. Oh the Prices You'll See: Designing a Fair Exchange System to Mitigate Personalized Pricing. Proceedings of the 2025 ACM Conference on Fairness, Accountability, and Transparency (ACM FAccT '25).
- 2. Naina Balepur and Hari Sundaram. 2024. Intervening to Increase Community Trust for Fair Network Outcomes. In ACM Conference on Fairness, Accountability, and Transparency (ACM FAccT '24).
- 3. Aditya Karan*, Naina Balepur*, and Hari Sundaram. 2023. Your Browsing History May Cost You: A Framework for Discovering Differential Pricing in Non-Transparent Markets. In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT '23).
- 4. Naina Balepur*, Andy Lee*, and Hari Sundaram. Friends with Costs and Benefits: Community Formation with Myopic, Boundedly-Rational Actors. arXiv preprint arXiv:2312.14293(2023).

Posters and Talks

Intervening to Increase Community Trust for Fair Network Outcomes

Talk at ACM FAccT 24

Talk at ACM FAccT 23

June 2024

June 2023

Your Browsing History May Cost You: A Framework for Discovering Differential Pricing in Non-Transparent Markets

A Model for Altruistic Social Learning on Networks

Poster at CRA WP 23 April 2023

Development and Application of a Game Theoretic Model for Competition Among Bacterial Strains in a Spatial Domain

Poster at Pitt Math Fest April 2019

Development and Application of a Game Theoretic Model for Competition Among Bacterial Strains in a Spatial Domain

Poster at Undergraduate Research Symposium

July 2018

Work Experience

US Army Construction Engineering Research Lab | Champaign, IL May - Aug 2023

- Worked as a research assistant at CERL under Joseph Gamez
- Reworked an existing project to run more smoothly and be accessible to a non-computing audience

^{*} authors contributed equally to this work

Teaching	CS 173: Discrete Structures at UIUC	Urbana, IL
	Instructor	SU24, FA24, SP25, SU25
	 Served as sole instructor in Summer 2024; co-instructed in Fall 2024, Spring 2025, Summer 2025 	
	CS 173: Discrete Structures at UIUC	Urbana, IL
	Head TA	SP23, FA23, SP24
	 Delegated tasks to TAs, developed rubrics 	
	CS 173: Discrete Structures at UIUC	Urbana, IL
	TA SP21, SU21, FA22, SP22, SU22, FA22	
	 Held office hours, graded exams, and helped students with group problem solving 	
	CS 125: Introduction to Computer Science at UIUC	Urbana, IL
	TA	FA20
	 Held office hours and designed review sessions 	
Awards	• Teacher Ranked as Excellent by Students, UIUC	Summer 2024
AND	• Travel Award, ACM FAccT	2024
Honors	• Lifetime Teaching Assistant Award, UIUC	Spring 2024
	• Graduate Student Outstanding Ambassador Award, UIUC	2024
	 Conference Presentation Funding Award, UIUC 	2024
	 NSF GRFP Honorable Mention 	2022
	Computer Science Excellence Fellowship, UIUC	2020-2021
	• Full Tuition Scholarship, Pitt	2016-2020
Leadership	Reviewer for: ACM EAAMO 25	
AND	ACM KDD 24	
Service	ACM WebConf 24	
	ACM WWW 22	
	Secretary: CS Graduate Student Organization	Aug 2022 - May 2024
		Aug 2025 - Present
	Technology Volunteer: Urbana Free Library	Jan 2022 - Present
	Vice President: CS Graduate Student Organization	Aug 2024 - May 2025

SKILLS **Programming:** Python, Java, SQL, MATLAB, R.

Mentor: GradSWE

Outreach Coordinator: GradSWE

Teaching Volunteer: Graduate Academy for College Teaching

Committee Member: CS Graduate Study Committee

May 2022 - May 2025

Oct 2021 - Aug 2022

Sept 2021 - Aug 2022

Aug 2024