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. <u>Designing Fair Systems for Consumers to Exploit Personalized Pricing</u>. *arXiv preprint* arXiv:2409.02777(2024).
- 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), June 3–6, 2024, Rio de Janeiro, Brazil. ACM, New York, NY, USA, 17 pages.
- 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)*. Association for Computing Machinery, New York, NY, USA, 717–735.
- 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

June 2024

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

Talk at ACM FAccT 23 June 2023

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 |
| | Served as sole instructor in Summer 2024, co-instructed with Prof. Carl Evans in Fall 2024 | |
| | 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, F. | A22, SP22, SU22, FA22 |
| | Held office hours, graded exams, and helped students with group problem solving | |
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| Awards | • Teacher Ranked as Excellent by Students, UIUC | Summer 2024 |
| and Honors | • Travel Award, ACM FAccT | 2024 |
| | • 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 KDD 24 | |
| and Service | ACM WebConf 24 | |
| | ACM WWW 22 | |
| | Vice President: CS Graduate Student Organization | Aug 2024 - Present |
| | Outreach Coordinator: GradSWE | May 2022 - Present |
| | Technology Volunteer: Urbana Free Library | Jan 2022 - Present |
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Aug 2022 - May 2024

Oct 2021 - Aug 2022

Sept 2021 - Aug 2022

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

Mentor: GradSWE

Secretary: CS Graduate Student Organization

Committee Member: CS Graduate Study Committee