

# NAINA BALEPUR PH.D. CANDIDATE

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<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. Designing Fair Systems for Consumers to Exploit Personalized Pricing. *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).

\* authors contributed equally to this work

POSTERS AND TALKS **Intervening to Increase Community Trust for Fair Network Outcomes** June 2024  
*Talk at ACM FAccT 24*

**Your Browsing History May Cost You: A Framework for Discovering Differential Pricing in Non-Transparent Markets** June 2023  
*Talk at ACM FAccT 23*

**A Model for Altruistic Social Learning on Networks** April 2023  
*Poster at CRA WP 23*

**Development and Application of a Game Theoretic Model for Competition Among Bacterial Strains in a Spatial Domain** April 2019  
*Poster at Pitt Math Fest*

**Development and Application of a Game Theoretic Model for Competition Among Bacterial Strains in a Spatial Domain** July 2018  
*Poster at Undergraduate Research Symposium*

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

TEACHING	<p><b>CS 173: Discrete Structures at UIUC</b> Urbana, IL  <i>Instructor</i> SU24, FA24</p> <ul style="list-style-type: none"> <li>Served as sole instructor in Summer 2024, co-instructed with Prof. Carl Evans in Fall 2024</li> </ul> <p><b>CS 173: Discrete Structures at UIUC</b> Urbana, IL  <i>Head TA</i> SP23, FA23, SP24</p> <ul style="list-style-type: none"> <li>Delegated tasks to TAs, developed rubrics</li> </ul> <p><b>CS 173: Discrete Structures at UIUC</b> Urbana, IL  <i>TA</i> SP21, SU21, FA22, SP22, SU22, FA22</p> <ul style="list-style-type: none"> <li>Held office hours, graded exams, and helped students with group problem solving</li> </ul>
AWARDS AND HONORS	<ul style="list-style-type: none"> <li><b>Teacher Ranked as Excellent by Students, UIUC</b> Summer 2024</li> <li><b>Travel Award, ACM FAccT</b> 2024</li> <li><b>Lifetime Teaching Assistant Award, UIUC</b> Spring 2024</li> <li><b>Graduate Student Outstanding Ambassador Award, UIUC</b> 2024</li> <li><b>Conference Presentation Funding Award, UIUC</b> 2024</li> <li><b>NSF GRFP Honorable Mention</b> 2022</li> <li><b>Computer Science Excellence Fellowship, UIUC</b> 2020-2021</li> <li><b>Full Tuition Scholarship, Pitt</b> 2016-2020</li> </ul>
LEADERSHIP AND SERVICE	<p><b>Reviewer for:</b> <i>ACM KDD 24</i>  <i>ACM WebConf 24</i>  <i>ACM WWW 22</i></p> <p><b>Vice President:</b> <i>CS Graduate Student Organization</i> Aug 2024 - Present</p> <p><b>Outreach Coordinator:</b> <i>GradSWE</i> May 2022 - Present</p> <p><b>Technology Volunteer:</b> <i>Urbana Free Library</i> Jan 2022 - Present</p> <p><b>Secretary:</b> <i>CS Graduate Student Organization</i> Aug 2022 - May 2024</p> <p><b>Committee Member:</b> <i>CS Graduate Study Committee</i> Oct 2021 - Aug 2022</p> <p><b>Mentor:</b> <i>GradSWE</i> Sept 2021 - Aug 2022</p>
SKILLS	<p><b>Programming:</b> Python, Java, SQL, MATLAB, R.</p>