

Tanvi Bajpai

PhD Candidate and Graduate Research Assistant

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tanvibajpai.com

EDUCATION

- **University of Illinois at Urbana Champaign (UIUC)** Urbana, IL
Ph.D Candidate in Computer Science Aug. 2019 – May 2024 (Expected)
 - Advisors: Prof. Chandra Chekuri and Prof. Eshwar Chandrasekharan
- **Carnegie Mellon University (CMU)** Pittsburgh, PA
B.S. in Computer Science (Additional Major in Discrete Math & Logic) Aug. 2015 – May. 2019
 - Research Advisor: Prof. R. Ravi

PUBLICATIONS

Papers Under Submission and Pre-prints

- **Bicriteria Approximation Algorithms for Priority Matroid Median**
Pre-print; To be submitted for peer-review in November 2022
Tanvi Bajpai, Chandra Chekuri
- **Measuring User-Moderator Alignment on r/ChangeMyView.**
Submitted for peer-review in July 2022
Vinay Koshy, **Tanvi Bajpai**, Eshwar Chandrasekharan, Karrie Karahalios, Hari Sundaram
- **ConvEx: A Visual Conversation Exploration System for Discord Moderators.**
Submitted for peer-review in July 2022
Frederick Choi, **Tanvi Bajpai**, Sowmya Pratipati, Eshwar Chandrasekharan

Peer-Reviewed Conference Publications

- **Harmonizing the Cacophony with MIC: An Affordance-aware Framework for Platform Moderation.**
ACM Conference On Computer-Supported Cooperative Work And Social Computing [CSCW 2022]
Tanvi Bajpai, Drshika Asher, Anwesa Goswami, Eshwar Chandrasekharan
- **Revisiting Priority k -Center: Fairness and Outliers.**
International Colloquium on Automata, Languages and Programming [ICALP 2021]
Tanvi Bajpai, Deeparnab Chakrabarty, Chandra Chekuri, Maryam Negahbani

Peer-Reviewed Journal Publications

- **A new system-wide diversity measure for recommendations with efficient algorithms.**
SIAM Journal of Mathematics of Data Science, Volume 1 [SIMODS 2019]
Arda Antikacioglu, **Tanvi Bajpai**, R. Ravi

HONORS AND AWARDS

- Outstanding TA Award** Fall 2020
Award Amount: \$200
 - Given to five teaching assistants each semester. Teaching assistants are nominated by faculty members for their dedication to teaching.
- K&L Gates Prize** 2019
Award Amount: \$5,000

- University award for graduating senior who has best inspired fellow students at the university to love learning through a combination of intellect, high scholarly achievement, engagement with others and character.

CMU Women’s Association Outstanding Graduating Senior Award 2019

Award Amount: \$1,500

- Award for graduating senior students, with a preference for students who demonstrate a commitment to the advancement of women in their academic pursuits.

Mark Stehlik Introductory & Service Teaching Award 2019

Award Amount: \$400

- Award for graduating senior who brings their best and indispensable efforts to teaching introductory courses.

CMU Senior Leadership Recognition 2019

CMU University Honors 2019

Mark Stehlik SCS Alumni Undergraduate Impact Scholarship 2018

Scholarship Amount: \$2,500

- Scholarship recognizes and supports CMU School of Computer Science undergraduates whose drive for excellence extends beyond the classroom - students who make a difference both in the field of computer science and the world around them.

EXPERIENCE

- **Illinois Secondary Teaching and Computer Science Initiative** Urbana, IL
Course Designer and Instructor Fall 2020 - May 2022
 - Designing and teaching discrete mathematics course for Illinois secondary school teachers as a part of a Computer Science accreditation program.

- **Microsoft** Redmond, WA
Explorer Intern Summer 2017
 - Worked for the Xbox Live Social team and their affiliate streaming platform Mixer. Developed a Node.js SDK to aid in chat-bot creation for Mixer and XBL users, and created a moderator chat-bot named MOSSMO that could monitor the overall sentiment of a chat and report users in order to demonstrate the SDK’s functionality.

TEACHING

I’ve worked as a teaching assistant for the following courses:

- **University of Illinois at Urbana-Champaign**
 - CS 374: Introduction to Algorithms and Models of Computation. Fall 2020+, Fall 2021
 - CS 473: Algorithms. Spring 2020
 - CS 173: Discrete Structures. Fall 2019+, Summer+
 - + - denotes semester placed on *Teachers Ranked as Excellent* list.
- **Carnegie Mellon University**
 - 15-451/15-651: Algorithm Design and Analysis. Spring 2018, Spring 2019
 - 15-151: Mathematical Foundations of Computer Science. Fall 2016, Fall 2017*, Fall 2018*
 - * - denotes semester serving as Head Teaching Assistant.

STUDENT ADVISING

- **Sowmya Pratipati** (Fall 2021 - present)
Sowmya received the UIUC CS Stars Fellowship in Fall 2021 and Fall 2022.
- **Drshika Asher** (Summer 2021 - present)
Drshika received the UIUC CS Stars Fellowship in Fall 2021. During the summer of 2022, she interned at Microsoft Research. In Spring 2022, she was named a Clare Boothe Luce Scholar.
- **Anwesa Goswami** (Spring 2021)

SERVICE AND OUTREACH

Reviewing

- **Operations Research Letters**,
Journal (2021 - 2022)

Outreach

- **Graduate Women in Computer Science (GradWCS)**
Co-President (UIUC, 2019 - 2021)
- **Women School of Computer Science (W@SCS)**
Undergraduate Event Coordinator, Graduate Student Liaison (CMU, 2017 - 2019)

Institutional Service

- **Broadening Participation in Computing Committee**
(UIUC, 2020 - 2021)
- **School of Computer Science Dean Search Committee**
(CMU, 2018 - 2019)

TECHNICAL SKILLS

- **Programming Languages:** Python, Java/Javascript, C/C++, OCaml, Processing, HTML/CSS
- **Technologies:** L^AT_EX, Jupyter Notebook, Pytorch