Meena Jagadeesan

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Summary.

I am a 1st year Computer Science PhD student at UC Berkeley, where I am a member of the Berkeley AI Research Lab (BAIR) and the Theory Group. I work on research on the theoretical foundations of machine learning and algorithms.

Education

UC Berkelev

PHD IN COMPUTER SCIENCE

Selected Honors: EECS Excellence Award

Harvard University

S.M. IN COMPUTER SCIENCE

Harvard University

A.B. IN COMPUTER SCIENCE AND MATH, summa cum laude

• Secondary Field: Statistics

• Selected Honors: Phi Beta Kappa, Hoopes Prize, Detur Book Prize, Certificate of Distinction in Teaching

Phillips Exeter Academy HIGH SCHOOL DIPLOMA

Exeter, NH, USA Sept. 2012- June 2016

Berkeley, CA, USA

Aug. 2020 - Present

Cambridge, MA, USA

Sept. 2019- May 2020

Cambridge, MA, USA

Sept. 2016- May 2020

Fellowships_

Berkeley Fellowship (2022-2024)

Paul and Daisy Soros Fellowship for New Americans (2020-2022)

Siebel Scholarship (2019-2020)

Honors & Awards

CRA Outstanding Undergraduate Researcher Award (2020)

NeurIPS Oral Presentation (2019)

Barry Goldwater Scholar (2018)

Intel Science Talent Search, 2nd Place in Basic Research (2016)

Davidson Fellow Laureate (2016)

Publications _____ (* denotes equal contribution or alphabetical ordering)

PREPRINTS:

• Fairness in ad auctions through inverse proportionality. Manuscript under submission. Shuchi Chawla* and Meena Jagadeesan*.

CONFERENCE AND JOURNAL PAPERS:

- Multi-Category Fairness in Sponsored Search Auctions. Proceedings of the 3rd ACM Conference on Fairness, Accountability and Transparency (FAT*), pp. 348–358, 2020.
 - Christina Ilvento*, Meena Jagadeesan*, and Shuchi Chawla.
- Individual Fairness in Pipelines. Proceedings of the 1st Conference on Foundations of Responsible Computation (FORC), pp. 7:1-7:22, 2020.
 - Cynthia Dwork*, Christina Ilvento*, and Meena Jagadeesan*.
- Understanding Sparse JL for Feature Hashing. Proceedings of the 33rd Annual Conference on Neural Information Processing Systems (NeurIPS), pp. 15177-15187, 2019. NeurIPS 2019 Oral presentation (given to 3% of accepted papers).

Meena Jagadeesan.

• Simple Analysis of Sparse, Sign-Consistent JL. Proceedings of the 23rd International Conference on Randomization and Computation (RANDOM), pp. 61:1–61:20, 2019. Meena Jagadeesan.

- Varying the Number of Signals in Matching Markets. Proceedings of the 14th International Conference on Web and Internet Economics (WINE), pp. 232-245, 2018.
 - Meena Jagadeesan* and Alexander Wei*.
- Dyson's Partition Ranks and their Multiplicative Extensions. The Ramanujan Journal, Vol. 45, Issue 3, pp. 817–839, April 2018.
 - Elaine Hou* and Meena Jagadeesan*.
- Mobius Polynomials of Face Posets of Convex Polytopes. Communications in Algebra, Vol. 44, Issue 11, pp. 4945-4972, 2016.

Meena Jagadeesan and Susan Durst.

SHORT CONFERENCE PAPERS:

• From Worst-Case to Average-Case Analysis: Accurate Latency Predictions for Key-Value Storage Engines. Proceedings of the ACM International Conference on Management of Data (SIGMOD), pp. 2853-3855, 2020. 1st Place at SIGMOD SRC.

Meena Jagadeesan* and Garrett Tanzer*.

Theses

• The Performance of Johnson-Lindenstrauss Transforms: Beyond the Classical Setting. *Undergraduate Thesis*. Awarded Hoopes Prize.

Advised by Prof. Jelani Nelson.

Talks

- INFORMS Annual Meeting, Market Algorithms Session (11/11/20): "Fairness in Advertising Auctions".
- *Microsoft Research MLO Group Seminar* (6/24/20): "Understanding Sparse Johnson-Lindenstrauss Transforms for Feature Hashing".
- Algorithmic Game Theory Mentoring Workshop at ACM EC (6/15/20): "Fairness in Advertising Auctions".
- ACM FAT* (1/29/20): "Multi-Category Fairness in Sponsored Search Auctions".
- NeurIPS (12/12/19): "Understanding Sparse JL for Feature Hashing".
- RANDOM (9/21/19): "Simple Analysis of Sparse, Sign-Consistent JL".
- University of Wisconsin-Madison Theory Seminar (5/17/19): "Analyzing Johnson-Lindenstrauss Transforms".
- WINE (12/17/18): "Varying the Number of Signals in Matching Markets".
- Workshop on Frontiers of Market Design at ACM EC (6/22/18): "Varying the Number of Signals in Matching Markets".

Industry Experience _____

Microsoft Research

Redmond, WA

Undergraduate Research Intern

May 2020 - Aug. 2020

- Research intern at MSR AI in the Machine Learning and Optimization Group
- Mentors: Ilya Razenshteyn and Suriya Gunasekar

Microsoft

San Francisco, CA May 2018 - Aug. 2018

SOFTWARE ENGINEER/PROGRAM MANAGER INTERN

Teaching and Service

Reviewer/Sub-Reviewer

2019-Present

• Reviewed submissions for ACM FAccT, STACS, ITCS, SOSA, Management Science, and JAIR.

Mentor for BAIR Undergraduate Mentorship Program

Sept. 2020 - Present

• Mentored undergraduate students from underrepresented groups who are interested in pursuing AI research.

Teaching Fellow for Harvard CS 61

Sept. 2018 - Dec. 2018

• CS 61 is Harvard's introductory systems programming class for computer science undergraduates. I led a biweekly discussion section and weekly Office Hours, helped design section materials, and graded problem sets. **Awarded a Certification of Distinction in Teaching**.