# 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 BAIR and the Theory Group. I work on research in algorithms and machine learning, with a focus on theoretical foundations and societal impact.

### **Education**

UC Berkeley

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 2016-2020

Berkeley, CA, USA

Cambridge, MA, USA

Cambridge, MA, USA

2020 - Ongoing

2019-2020

2019-2020

# **Fellowships**

**Paul and Daisy Soros Fellowship for New Americans** (2020-2024).

Berkeley Fellowship (2020-2024).

Siebel Scholarship (2019-2020).

**Barry Goldwater Scholarship** (2018-2020).

### **Honors & Awards**

**CRA Outstanding Undergraduate Researcher Award** (2020).

**NeurIPS Oral Presentation** (2019).

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

**Davidson Fellow Laureate** (2016).

## **Publications**

\_\_\_\_\_ (\* denotes equal contribution or alphabetical ordering)

#### **CONFERENCE AND JOURNAL PAPERS:**

- Multi-Category Fairness in Sponsored Search Auctions. Proceedings of the 3rd ACM Conference on Fairness, Accountability and Transparency (FAT\*), 2020, pp. 348–358.

  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), 2019, pp. 15177-15187. 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.
- Dyson's Partition Ranks and their Multiplicative Extensions. The Ramanujan Journal, Vol. 45, Issue 3, April 2018, pp. 817–839.

Elaine Hou\* and Meena Jagadeesan\*.

• Mobius Polynomials of Face Posets of Convex Polytopes. Communications in Algebra, Vol. 44, Issue 11, 2016, pp. 4945-4972.

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), 2020, pp. 2853-3855. 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

- *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 ResearchRedmond, WAUndergraduate Research InternMay 2020 - Aug. 2020

• Research intern at MSR AI with the the Machine Learning and Optimization Group

• Mentors: Ilya Razenshteyn and Suriya Gunasekar

MicrosoftSan Francisco, CASOFTWARE ENGINEER/PROGRAM MANAGER INTERNMay 2018 - Aug. 2018

# Teaching and Service\_

#### Reviewer/Sub-Reviewer

2019-Present

• Reviewed submissions for 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.