Aravind Reddy Talla

talla@broadinstitute.org | aravindreddy.com

EDUCATION

Northwestern University — Evanston, IL
Ph.D. in Computer Science, Advisers: Konstantin Makarychev and Aravindan Vijayaraghavan — June 2023
M.S. in Computer Science, GPA: 4.0 — March 2021

Indian Institute of Technology (IIT) Kanpur
Bachelor of Technology (B.Tech.) in Computer Science with minor in Physics, *Distinction* — May 2018

APPOINTMENTS

Broad Institute of MIT and Harvard, Postdoctoral Associate — Cambridge, MA
Primary mentor: Victoria Popic — July 2023 -

Adobe Research, Intern — San Jose, CA (remote)
Primary mentor: Ritwik Sinha — Summer 2022
Primary mentors: Ryan Rossi and Zhao Song — Summer 2021

Paris Centre for Quantum Technologies, Université Paris Diderot, Intern — Paris, France
Mentors: Eleni Diamanti and Iordanis Kerenidis, partly funded by Charpak Scholarship — Summer 2017

Centre for Quantum Technologies, National University of Singapore, Intern — Singapore
Mentor: Hartmut Klauck — Summer 2016

PUBLICATIONS

Dynamic Tensor Product Regression
with Zhao Song and Lichen Zhang, link — *NeurIPS 2022*

Adaptive and Dynamic Multi-Resolution Hashing for Pairwise Summations
with Lianke Qin, Zhao Song, Zhaozhuo Xu, and Danyang Zhuo, link — *BigData 2022*

One-Pass Algorithms for MAP Inference of Nonsymmetric Determinantal Point Processes
with Ryan Rossi, Zhao Song, Anup Rao, Tung Mai, Nedim Lipka, Gang Wu, Eunyee Koh, and Nesreen Ahmed, link — *ICML 2022*

Beyond Perturbation Stability: LP Recovery Guarantees for MAP Inference on Noisy Stable Instances
with Hunter Lang, David Sontag, and Aravindan Vijayaraghavan, link — *AISTATS 2021*

Improved Guarantees for k-means++ and k-means++ Parallel
with Konstantin Makarychev and Liren Shan, link — *NeurIPS 2020*

PATENT

Online Inference and Learning for Nonsymmetric Determinantal Point Processes — 2022
with Ryan Rossi, Zhao Song, Anup Rao, Tung Mai, Nedim Lipka, Gang Wu, and Eunyee Koh — *Filed at USPTO*

AWARDS & GRANTS

Adobe Research Gift Grant ($20,000) — 2022
Peter and Adrienne Barris Outstanding Teaching Assistant Award, Northwestern, press release — 2022
Charpak Scholarship for Research Internship, Government of France — 2017
National Initiative on Undergraduate Science Scholarship, HBCSE (TIFR) — 2015
Gold Medallist, Indian National Physics Olympiad, *National top 35* — 2014

SERVICE

Teaching Assistant: Mathematical Foundations of Computer Science (NU) - Spring 2022, Fall 2020, Fall 2019;
Design & Analysis of Algorithms (NU) - Winter 2019; Fundamentals of Computing (IITK) - Winter 2018
Conference Reviewer: Total: 21 papers, NeurIPS (2022 (6 papers), 2021 (3 papers)), ICML (2023 (4 papers), 2022 (2 papers)), ICLR (2023 (2 papers), 2022 (1 paper)), AISTATS 2023 (3 papers)
Workshop Leader and Mentor: NeurIPS 2022 High-School Outreach Program
Volunteer Math Tutor: 2021-22 academic year, for a Chicago area middle-school student, at Tutoring Chicago
Board Member: CS PhD Advisory Council (NU, 2020 - 2022) | **Webmaster**: Northwestern CS Theory (2018 - 2023)