# Aravind Reddy Talla

talla@broadinstitute.org | aravindreddy.com

## EDUCATION & SCIENTIFIC TRAINING

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

**Northwestern University,** M.S., Ph.D.     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

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

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

**Paris Centre for Quantum Computing, 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
**Conference Volunteer**: STOC 2021, 2020, AISTATS 2021, NeurIPS 2020, FSTTCS 2017
**Volunteer Math Tutor**: For a Chicago area middle-school student, for the 2021-22 academic year.
**Board Member**: CS PhD Advisory Council (NU, 2020 - 2022) | **Webmaster**: Northwestern CS Theory (2018 - 2023)