

# Aravind Reddy Talla

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## EDUCATION

### Northwestern University

*Ph.D. in Computer Science*

*Master of Science in Computer Science, GPA: 4.0*

Evanston, IL

*June 2023 (Expected)*

*March 2021*

### Indian Institute of Technology (IIT) Kanpur

*Bachelor of Technology in Computer Science, Minor in Physics, Distinction*

*2018*

## RESEARCH EXPERIENCE

### Northwestern University

Advisors: Konstantin Makarychev and Aravindan Vijayaraghavan

Fall 2018 – Present

*Evanston, IL*

### Adobe Research, San Jose

Primary mentors: Ritwik Sinha and David Arbour

Primary mentors: Ryan Rossi and Zhao Song

remote

Summer 2022 (upcoming)

Summer 2021

### Paris Centre for Quantum Computing, *Université Paris Diderot*

Mentors: Eleni Diamanti and Iordanis Kerenidis, partly funded by Charpak Scholarship

Summer 2017

*Paris, France*

### Centre for Quantum Technologies, *National University of Singapore*

Mentor: Hartmut Klauck

Summer 2016

*Singapore*

## PUBLICATIONS

### One-Pass Algorithms for MAP Inference of Nonsymmetric Determinantal Point Processes

with Ryan Rossi, Zhao Song, Anup Rao, Tung Mai, Nedim Lipka, Gang Wu, Eunye Koh, and Nesreen Ahmed

*ICML 2022 (to appear)*

### Beyond Perturbation Stability: LP Recovery Guarantees for MAP Inference on Noisy Stable Instances

with Hunter Lang, David Sontag, and Aravindan Vijayaraghavan, [arXiv](#)

*AISTATS 2021*

### Improved Guarantees for k-means++ and k-means++ Parallel

with Konstantin Makarychev and Liren Shan, [arXiv](#)

*NeurIPS 2020*

## PATENT

### Online Inference and Learning for Nonsymmetric Determinantal Point Processes

with Ryan Rossi, Zhao Song, Anup Rao, Tung Mai, Nedim Lipka, Gang Wu, and Eunye Koh

2022

*Under review*

## AWARDS & SCHOLASTIC ACHIEVEMENTS

**Gold Medallist**, Indian National Physics Olympiad, *National top 35*

2014

**National Initiative on Undergraduate Science Scholarship**, HBCSE (TIFR)

2015

**Academic Excellence Award**, IIT Kanpur

2015

**Charpak Scholarship for research internship**, French Government

2017

**STOC 2019 Student Travel Grant**, ACM SIGACT

2019

## TECHNICAL SKILLS

**Programming Languages:** C, Python, Bash, Octave | **Web-Dev:** HTML, CSS, Hugo | **Tools:**  $\LaTeX$ , Git, Gurobi |

**Natural Languages:** Native Proficiency - English, Telugu, Hindi, Elementary Proficiency - Korean

## SERVICE

**Reviewer:** NeurIPS 2022, 2021, ICML 2022, ICLR 2022

**Volunteer:** STOC 2021, 2020, AISTATS 2021, NeurIPS 2020, FSTTCS 2017

**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

**Board Member:** Northwestern CS PhD Advisory Council (2020 - 2022)

**Webmaster:** Northwestern CS Theory group (2018 - Present)

**Coordinator:** Card & Board Games Club, Science Coffeehouse IIT Kanpur (2016 - 17)