

# Aravind Reddy Talla

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## EDUCATION

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**Northwestern University** Evanston, IL  
Ph.D. in Computer Science, advised by Konstantin Makarychev and Aravindan Vijayaraghavan. June 2023 (Expected)  
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* 2018

## PROFESSIONAL EXPERIENCE

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**Research Scientist Intern**, Adobe Research San Jose (remote)  
Primary mentor: Ritwik Sinha Summer 2022  
Primary mentors: Ryan Rossi and Zhao Song, resulted in an ICML 2022 publication and patent filing. Summer 2021

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

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

## PUBLICATIONS

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**Dynamic Tensor Product Regression**  
with Zhao Song and Lichen Zhang *NeurIPS 2022 (to appear)*

**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, [link](#) *ICML 2022*

**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

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

## AWARDS & GRANTS

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**Peter and Adrienne Barris Outstanding Teaching Assistant Award (\$500)**, Northwestern 2022

**Adobe Research Gift Grant (\$20,000)** 2022

**Charpak Scholarship for Research Internship**, Government of France 2017

**Academic Excellence Award**, IIT Kanpur 2015

**National Initiative on Undergraduate Science Scholarship**, HBCSE (TIFR) 2015

**Gold Medallist**, Indian National Physics Olympiad, *National top 35* 2014

## TECHNICAL SKILLS

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**Programming Languages:** C, Python | **Tools:**  $\LaTeX$ , Git, Gurobi  
**Natural Languages:** Native/Bilingual Proficiency - English, Telugu, Hindi; Limited Working Proficiency - Korean

## SERVICE

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

**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:** CS Theory group (NU, 2018 - Present)