Aravind Reddy Talla

aravind.reddy@cs.northwestern.edu | aravindreddy.org

Education

Northwestern University — Evanston, IL
Ph.D. in Computer Science, Grade Point Average: 3.96/4.00 — *2023 (Expected)*

Indian Institute of Technology (IIT) Kanpur
Bachelor of Technology in Computer Science, Minor in Physics, Distinction — *2018*

Publications

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

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

Research Experience

Northwestern University — Fall 2018 – Present
Advisors: Prof. Konstantin Makarychev and Prof. Aravindan Vijayaraghavan — *Evanston, IL*

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

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

Teaching Assistant Experience

CS 212: Mathematical Foundations of Computer Science, Northwestern University — Fall 2020, Fall 2019
CS 336: Design & Analysis of Algorithms, Northwestern University — Winter 2019
ESC 101: Fundamentals of Computing, IIT Kanpur — Winter 2018

Awards & Scholastic Achievements

STOC 2019 Student Travel Grant, ACM SIGACT — 2019
Charpak Scholarship for research internship, French Government — 2017
National Initiative on Undergraduate Science Scholarship, HBCSE (TIFR) — 2015
Academic Excellence Award, IIT Kanpur — 2015
Gold Medallist, Indian National Physics Olympiad, *National top 35* — 2014

Selected Coursework

Machine Learning: Algorithmic Aspects of Inference, Computational Learning Theory, Machine Learning
Theoretical CS: Algorithmic Mechanism Design, Approximation Algorithms, Computational Complexity, Cryptography, Expander Graphs, Lattices in Computer Science, Quantum Computing, Quantum Cryptography
Math: Probability Theory & Stochastic Analysis, Spectral Graph Theory

Technical Skills

Languages: C, Python, Bash, Octave | **Web-Dev**: HTML, CSS, Hugo | **Tools**: Git, Gurobi, LaTeX, GNU Plot, Vim

Service

Volunteer: NeurIPS 2020, STOC 2020, and FSTTCS 2017 | **Board Member**: Northwestern CS PhD Advisory Council
Webmaster: Northwestern CS Theory group | **Coordinator**: Card & Board Games Club, IIT Kanpur (2016 - 17)