Shivam Gupta

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EDUCATION University of Texas at Austin Aug 2018 – Present

Ph.D. in Computer Science (Advisor: Eric Price)

Coursework: Probability and Stochastic Processes, Learning Theory, Coding Theory, Theoretical Statistics, Randomized Algorithms, Markov Chains and Mixing Time, Numerical Linear Algebra, Wireless Networking Teaching assistant for Computer Programming (Fall 2018), Data Analytics (Spring 2019), Machine Learning (Summer

2019, Fall 2019), Algorithms & Complexity (Spring 2020), Sublinear Algorithms (Fall 2020)

University of Illinois at Urbana-Champaign

B.S. in Computer Science, Minor in Mathematics May 2018

EXPERIENCE Massachusetts Institute of Technology

Cambridge, MA Visiting Student (Supervisor: Sam Hopkins) Jun 2023 – Aug 2023

University of California, Berkeley Berkeley, CA

Visiting Student Researcher (Host: Jelani Nelson) Aug 2022 – May 2023

Sigma Computing, Inc. San Francisco, CA

Research Intern May 2022 - Aug 2022

University of Wisconsin, Madison Madison, WI

Research Intern (Supervisor: Ilias Diakonikolas) May 2020 – Aug 2020

New York, NY

Software Developer Intern May 2016 – Aug 2016

Bloomberg L.P. New York, NY R&D Intern May 2015 - Aug 2015

PUBLICATIONS Sample-Efficient Training for Score-Based Diffusion

Shivam Gupta, Aditya Parulekar, Eric Price, Zhiyang Xun

Minimax-Optimal Location Estimation NeurIPS 2023

Shivam Gupta, Jasper C.H. Lee, Eric Price, Paul Valiant

Finite-Sample Symmetric Mean Estimation with Fisher Information Rate COLT 2023

Shivam Gupta, Jasper C.H. Lee, Eric Price

High-dimensional Location Estimation via Norm Concentration for Subgamma Vectors ICML 2023

Shivam Gupta, Jasper C.H. Lee, Eric Price

Finite-Sample Maximum Likelihood Estimation of Location NeurIPS 2022

Shivam Gupta, Jasper C.H. Lee, Eric Price, Paul Valiant

Outlier-Robust Sparse Estimation via Non-Convex Optimization NeurIPS 2022

Yu Cheng, Ilias Diakonikolas, Rong Ge, Shivam Gupta, Daniel Kane, Mahdi Soltanolkotabi

Sharp Constants in Uniformity Testing via the Huber Statistic

Shivam Gupta, Eric Price

Nash Equilibrium Computation in Resource Allocation Games

AAMAS 2018

COLT 2022

In submission

Shivam Gupta, Ruta Mehta

SELECTED AWARDS

- C.W. Gear Outstanding Undergraduate Student Award 2018
- Conference Travel Grant 2018 (for travel to AAMAS)
- Horace and Kate King Wu International Undergraduate Scholarship 2018
- Illinois Engineering Achievement Scholarship 2017
- NTT Data, Inc., Scholarship 2015, 2016
- Franz Hohn and J.P. Nash Scholarship 2015 (for research in scientific computing)
- Perfect score in the Indian National Olympiad in Informatics, and selected as one of 26 students in India to attend the International Olympiad in Informatics training camp 2014
- ACM ICPC Mid-Central Regional: Team placed 6th in 2017, 4th in 2016
- Represented India in the SEARCC Software Competition 2013, Colombo, Sri Lanka, and placed 3rd
- Placed 2nd in Dropbox Open programming contest 2015 at UIUC
- Won Bloomberg CodeCon Challenge and invited to CppCon 2015 in Bellevue, Washington
- · Won 3Red Trading Tech Challenge in 2015 and 2016 and invited to Chicago

REVIEWING SODA 2021, 2024; NeurIPS 2023; ITCS 2024; ALT 2024; ICLR 2024

LANGUAGES C/C++, Python, Java, OCaml, Haskell, JavaScript, HTML, CSS