

ADITYA VIKRAM SINGH

Department of Electrical Communication Engineering
Indian Institute of Science, Bengaluru
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Education

- | | |
|---|---------------------|
| Indian Institute of Science, Bengaluru
PhD program in Department of Electrical Communication Engineering
(Prime Minister's Research Fellow)
<u>Research:</u> <i>Statistical Inference and Stochastic Approximation under Information Constraints</i>
(Advised by Dr. Himanshu Tyagi) | Aug 2019 – Present |
| Indian Institute of Science, Bengaluru
Master of Technology (Research) in Electrical Engineering
<u>Research:</u> <i>Theoretical and Algorithmic Aspects of Rigid Registration</i>
(Advised by Dr. K.N. Chaudhury) | Aug 2016 – Jan 2019 |
| Indian Institute of Technology, Hyderabad
Bachelor of Technology in Electrical Engineering with Minor in Physics | 2009 – 2013 |

Employment

- | | |
|--|---|
| Indian Institute of Science
Bengaluru, India | Research Assistant
Feb 2019 - Jun 2019 |
| Qualcomm India Pvt. Ltd.
Hyderabad, India | Engineer
2013 - 2015 |
| Gallium Arsenide Enabling Technology Center
Hyderabad, India | Intern
Summer 2012 |

Papers

(Manuscripts accessible from personal webpage)

- [1] J. Acharya, C. Canonne, A.V. Singh, H.Tyagi. **Optimal Rates for Nonparametric Density Estimation under Communication Constraints.** *Accepted for poster presentation at Neural Information Processing Systems (NeurIPS) 2021.*
- [2] A.V. Singh, K.N. Chaudhury. **On Uniquely Registrable Networks.** *IEEE Transactions on Network Science and Engineering* 7(3): 1327-1336 (2020). (Oral presentation at IEEE International Conference on Acoustic, Speech, and Signal Processing (ICASSP) 2019.)
- [3] R. Sanyal, A.V. Singh, K.N. Chaudhury. **An Iterative Eigensolver for Rank-Constrained Semidefinite Programming.** *Oral presentation at National Conference on Communications (NCC) 2019.*
- [4] A.V. Singh, K.N. Chaudhury. **Convergence Analysis of Nonconvex ADMM for Rigid Registration.** *Preprint at arXiv:1907.07729.*

ADITYA VIKRAM SINGH

Teaching

TA for graduate courses on Information Theory (2020), Concentration Inequalities (2021)

Service

Reviewer for IEEE Transactions on Information Theory