# ADITYA VIKRAM SINGH

Department of Electrical Communication Engineering

Indian Institute of Science, Bengaluru

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### Education

#### Indian Institute of Science, Bengaluru

Aug 2019 – Present

PhD program in Department of Electrical Communication Engineering

(Prime Minister's Research Fellow)

Research: Statistical Inference and Stochastic Approximation under Information Constraints

(Advised by Dr. Himanshu Tyagi)

#### Indian Institute of Science, Bengaluru

Aug 2016 – Jan 2019

Master of Technology (Research) in Electrical Engineering Research: Theoretical and Algorithmic Aspects of Rigid Registration

(Advised by Dr. K.N. Chaudhury)

### Indian Institute of Technology, Hyderabad

2009 - 2013

Bachelor of Technology in Electrical Engineering with Minor in Physics

# **Employment**

<b>Indian Institute of Science</b>	Research Assistant
Bengaluru, India	Feb 2019 - Jun 2019
<b>Qualcomm India Pvt. Ltd.</b> Hyderabad, India	Engineer 2013 - 2015
Gallium Arsenide Enabling Technology Center	Intern
Hyderabad, India	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.