Mail: apoorv.singh@nyu.edu Web: www.savs95.github.io

**EDUCATION** New York University, Tandon School of Engineering

Ph.D. Student in Computer Science

Sept 2020 - Present

Advisor: Christopher Musco

International Institute of Information Technology, Bangalore

Integrated Masters of Technology Aug 2013 - July 2018

Information Technology, Specialization: Theoretical Computer Science

Thesis: Clustering Perturbation Resilient Instances

Advisor: G. Srinivasaraghavan

Visiting Researcher, INRIA Lille EXPERIENCE

Oct 2019 - Jan 2020

MODAL Team, INRIA Lille, France

Advisor(s): Hemant Tyagi (INRIA), Mihai Cucuringu (Univ. of Oxford)

Project Associate, IISc Bangalore

Aug 2018 - Aug 2019

Department of CSA, Indian Institute of Science (IISc)

Advisor(s): Anand Louis (IISc), Amit Deshpande (Microsoft Research)

Narendra Summer Intern, IISc Bangalore

Summer 2017

Department of CSA, Indian Institute of Science

Advisor: Anand Louis

**PUBLICATIONS** 

1. Moments, Random Walks, and Limits for Spectrum Approximation

(with Yujia Jin, Christopher Musco, and Aaron Sidford) COLT 2023, (Link)

2. Regularized Spectral Methods for Clustering Signed Networks

(with Mihai Cucuringu, Deborah Sulem, and Hemant Tyagi) *JMLR* 2021, (Link)

3. On Euclidean k-Means Clustering with  $\alpha$ -Center Proximity

(with Amit Deshpande, and Anand Louis)

AISTATS 2019, (Link)

4. Approximation Algorithms for Cost-Balanced Clustering

(with Amit Deshpande, Anand Louis, and Deval Patel)

Preprint 2019, (Link)

**TEACHING** 

• E0306: Deep Learning, Theory and Practice

Spring 2019

Grader for the course at IISc Bangalore

• E0203: Spectral Algorithms

Spring 2018

Grader for the course at IISc Bangalore

**NYU COURSES** 

• Probability Theory 1 & 2 • Concentration of Measure • Info Thy Methods in Stats

Intro to Analysis 2

Algorithmic ML & DS

Mathematical Statistics

Advanced ML

Bayesian ML

· Rand Numerical LA

SERVICE

Sub-reviewer for FOCS 2022, STOC 2023