## Research Interests\_

Theoretical machine Learning, Optimization, Algorithms.

## **Education**

**New York University** 

NY, USA

Master of Science in Computer Science, 3.77/4 GPA

September 2019 - Present

• Key courses: Algorithmic Machine Learning and Data Science, Mathematical Tools for Data Science, Machine Learning, Big Data.

University of Pune Pune, India

Bachelor of Engineering in Computer Engineering, 8.22/10 CGPA

July 2013 - May 2017

• *Key courses*: Design and Analysis of Algorithms, Natural Language Processing, Data mining, Operating systems, Computer networks, Theory of Computation.

## **Publications**

Authors appear in alphabetical order.

### **Dynamic Trace and Spectral Density Estimation**

Prathamesh Dharangutte, Christopher Musco. In progress.

### **Graph Learning for Inverse Landscape Genetics**

Prathamesh Dharangutte, Christopher Musco.

AAAI Conference on Artificial Intelligence (AAAI 2021).

# Research Experience

#### **New York University Tandon**

Brooklyn, NY

Graduate Student Researcher

Fall 2019 - Present

• Advised by: Prof. Christopher Musco

# Teaching Experience \_\_\_\_\_

### **Introduction to Machine Learning (NYU CS-UY 4563)**

Teaching Assistant

Spring 2020

Instructor: Prof. Christopher Musco New York University Tandon

# Professional Experience \_\_\_\_\_\_

#### **HSBC Software Development**

Pune. India

August 2017 - November 2018

Software Engineer

- Developed and maintained web application for internal use.
- Restructured the architecture of RTC plugin for better scaling.
- Developed chatbot for internal use within teams at the organization.

#### **Prism IT Solutions**

Pune, India

Software Engineer Intern

December 2015 - May 2016

- Developed a framework for processing and extracting insights from XML data using Apache Spark.
- Surveyed algorithms for determining emotion in audio to integrate with company's product.

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Projects		

### **Energy-based Graph Neural Networks**

- Studied Graph Convolutional Networks from an energy-based view with the aim of creating a more robust classifier.
- Course instructor: Prof. Carlos Fernandez-Granda

### **Expressive English TTS system**

- Studied how emotions cause variation in human speech and ways to incorporate it into a Text-To-Speech system.
- Advised by: Prof. Girish Potdar

# Technical Skills\_

**Programming** Python, Java, Javascript

**Tools and Libraries** PyTorch, Tensorflow, Django, Spark, Spring