

# Aarshvi Gajjar – CV

aarshvi@nyu.edu  
Website : <https://aarshvig.github.io/>

## EDUCATION

### New York University

*Ph.D. Computer Science (Advisors: Christopher Musco and Chinmay Hegde) - 3.89/4.0*

Expected 2025

### UMass Amherst

*M.S. Computer Science (Advisor: Cameron Musco) - 3.93/4.0*

2019 - 2021

### IIIT Hyderabad

*B.Tech. Electronics and Communication Engineering*

2012 - 2016

## RESEARCH INTERESTS

Active Learning, Sketching and Sampling, High Dimensional Statistics, Dimensionality Reduction

## PUBLICATIONS

Improved Bounds for Agnostic Active Learning of Single Index Models with Xingyu Xu, Chinmay Hegde and Christopher Musco.  
Short version accepted at RealML Workshop, **NeurIPS**, 2023.

Active Learning for Single Neuron Models with Lipschitz Non-Linearities with Christopher Musco and Chinmay Hegde.  
**AISTATS 2023**, *Short version selected as Spotlight at DLDE workshop*, **NeurIPS**, 2022.

Subspace Embeddings under Nonlinear Transformations with Cameron Musco.  
**ALT** (Algorithmic Learning Theory) 2021

## COURSES

- **Mathematics and Statistics.** Real Analysis II (Measure Theory) MATH-GA.1420, Information Theoretic Methods in Statistics MATH-GA.2840, Real Analysis I MATH-GA.1410, Mathematical Statistics DS-GA 3001, Financial Securities and Markets, Statistical Inference STAT608.
- **Computer Science.** Honors Analysis of Algorithms CSCI-GA-3520, Reinforcement Learning CS687, Machine Learning CS689, Probabilistic Graphical Models CS688, Algorithms for Data Science CS514.

## TEACHING

### Course Assistant

NYU Algorithmic Machine Learning and Data Science

Fall 2021, Spring and Fall 2022, Spring 2023

### Grader

UMass, Amherst Applied Cryptography - CS466, Machine Learning - CS689

Spring 2021 and Fall 2020

## INDUSTRY EXPERIENCE

### Amazon Research & Development

*Applied Science Intern, Natural Language Understanding group*

Aachen, Germany

Summer, 2020

Supervisors: Dr. Abujabal Abdalghani and Dr. Claudio Delli Bovi

- The goal was to re-score translations produced by a neural machine translator in order to bootstrap the NLU system for low-resource languages.
- We thoroughly investigated translation lists for language pairs such as EN-DE and EN-IT, and then implemented transfer learning using XLM-Roberta.

### Goldman Sachs

*Senior Quant Analyst, Surveillance Analytics Group*

Bangalore

Aug 2017 - Jun 2019

Supervisor: Dr. Mayur Thakur, Managing Director

- Designed and implemented systems for processing 1TB of daily data in a streaming pipeline for surveillance using Hadoop and Apache Flink.
- Implemented Hodrick-Prescott, ARIMA, and distributed Simhash models for data flow prediction and document clustering.

### WalmartLabs

*SDE, Retail Technology*

Bangalore

Aug 2016 - Aug 2017

### Tonbo Imaging

*Machine Learning Intern — Computer Vision*

Bangalore

Summer 2015

- Built a Toll Collection model for vehicle categorisation on real time videofeed.

## TECHNOLOGIES

---

Python, C++, Java, Matlab, PyTorch, Eigen, Huggingface, HADOOP, HDFS, Apache Flink

## OTHER

---

- Reviewer: ICLR 2024, ICML 2023 (external), NeurIPS 2023.
- Supported by the NYU Ph.D. Future Leader Fellowship, 2021-23.
- Visited Algorithmic Data Analysis summer school at Hausdorff School in Summer 2022 with travel grant.
- Received SIGACT Women in TCS travel awards for STOC 2022, FOCS 2022, and STOC 2023. Attended STOC 2023.
- Judge for Math projects at Terra NYC STEM Fair for high school students.
- Awarded the Grace Hopper Student Scholarship, 2020
- EMEA Rank of 96 among over 8000 participants in the Google Asia Pacific Coding Contest in 2015
- 99.99 percentile in the All India Engineering Entrance Examination (AIEEE) among 1,200,000 participants, 2012