Aarshvi Gajjar – CV

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Website : https://aarshvig.github.io/

EDUCATION

New York University   Expected 2025
Ph.D. Computer Science (Advisors: Christopher Musco and Chinmay Hegde) - 3.89/4.0
UMass Amherst   2019 - 2021
M.S. Computer Science (Advisor: Cameron Musco) - 3.93/4.0

IIIT Hyderabad   2012 - 2016
B.Tech. Electronics and Communication Engineering

RESEARCH INTERESTS

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

PUBLICATIONS

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   Algorithmic Machine Learning and Data Science
NYU   *Fall 2021, Spring and Fall 2022, Spring 2023*
Grader   Applied Cryptography - CS466, Machine Learning - CS689
UMass, Amherst   *Spring 2021 and Fall 2020*

INDUSTRY EXPERIENCE

Amazon Research & Development   Aachen, Germany
Applied Science Intern, Natural Language Understanding group   *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   Bangalore
Senior Quant Analyst, Surveillance Analytics Group   *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   Bangalore
SDE, Retail Technology   *Aug 2016 - Aug 2017*

Tonbo Imaging   Bangalore
Machine Learning Intern — Computer Vision   *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