Aarshvi Gajjar

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EDUCATION

University of Massachusetts Amherst
Master of Science in Computer Science - 3.9/4.0

Amherst, MA
Aug 2019 - May 2021

- Recipient of the Grace Hopper Scholarship, 2020.

International Institute of Information Technology (IIIT-H), Hyderabad
Bachelor of Technology in Electronics and Communication Engineering - 7.6/10

Hyderabad, IN
Jul 2012 - May 2016

RELEVANT PROJECTS

Masters Thesis: Compressed Sensing using Generative Models
Guide: Prof. Cameron Musco

Machine Learning Theory
Jan 2020 - Present

- Proving theoretical guarantees for reconstruction of linear inverse problems using generative models for structure assumption. The proof is based on results given by Price et. al..
- We study properties of subspace embeddings and epsilon nets to bound the number of measurements required for reconstruction using random projections.
- Submitting paper to Algorithmic Learning Theory end of September.

Style Transfer on Multiple Personas
Guide: Prof. Mohit Iyyer

Natural Language Processing
Fall 2019

- Style transfer on the multi persona dataset, PASTEL using modifications in RNN, LSTM architectures.
- Evaluation of Controlled and Combined style classification using finetuned BERT and Roberta.

EXPERIENCE

Amazon Alexa, Natural Language Understanding
Applied Science Intern

Aachen, Germany
Jun 2020 - Aug 2020

A Machine Translation Re Ranker for Bootstrapping *— XLMRoberta, HuggingFace, PyTorch*
Supervisors: Dr. Abujabal Abdalghani and Dr. Claudio Delli Bovi

- Investigation of N-Best list generated by general purpose Machine Translation Model for bootstrapping Alexa NLU model on low resource languages.
- Proposed a re ranker model to resurface translations similar to live data in target language for Alexa NLU. This model is based on XLMRoberta.

Goldman Sachs, Surveillance Analytics Group
Senior Software Engineer

Bangalore, IN
Aug 2017 - Jun 2019

Document Scoring Engine *— HBase, HDFS, Java, Python, Hadoop, YARN*
Supervisor: Dr. Mayur Thakur, Managing Director, Goldman Sachs

- Built a Document Scoring System from scratch for **Neon**, Goldman's search engine on Emails, IMs with 1TB data ingested daily.
- Developed and implemented scoring mechanisms for query independent scores, index zone scores and query parser scores.

Conversational Email Thread Detection *— Apache Flink*

- Implemented a distributed maximum spanning tree algorithm from emails to infer a conversation tree from streaming data.

Document Similarity Scoring *— Apache Flink*

- Implemented distributed *Simhash* for clustering near duplicate documents from streaming data.

WalmartLabs, Next Generation Pricing
Software Development Engineer

Bangalore, IN
August 2016 - August 2017

- Developed functionalities for NGP-Markdown to generate strategies for price markdown of 8 million Walmart items using Java, Cassandra.

Tonbo Imaging
Machine Learning Intern — C++, OpenCV

Bangalore, IN
Summer 2015

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

Recent Courses

Reinforcement Learning (CS687), Probabilistic Machine Learning (CS689), Probabilistic Graphical Models (CS688), Statistical Inference (STAT608) Algorithms for Data Science(CS514), Natural Language Processing(CS585)

Teaching Experience

Grader   Machine Learning - CS689
University of Massachusetts, Amherst   *Fall, 2020*

Teaching Assistant   Signals and Systems, Statistical Mechanics
IIIT Hyderabad   *Fall, 2014, Spring, 2015*

Achievements

- Awarded the Grace Hopper Student Scholarship, 2020
- EMEA rank of 96 in Google APAC in 2015
- All India rank of 2876 in the All India Engineering Entrance Examination (AIEEE), 2012 among 1,200,000 participants