

EDUCATION

- **Birla Institute of Technology and Science, Pilani** Hyderabad, India
B.E.(Hons.) Computer Science - CGPA: 8.36 *Aug 2015 - May 2019*
 - **Relevant Coursework:** Machine Learning · Data Mining · Information Retrieval · Artificial Intelligence · Computer Networks · Operating Systems · Probability and Statistics · Linear Algebra and Complex Variables

PUBLICATIONS

- **Generating Text through Adversarial Training Using Skip-Thought Vectors** *June 2019*
Afroz Ahamad
 - Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Student Research Workshop (NAACL-HLT 2019: SRW)
 - Used Skip-Thought sentence embeddings with DCGAN to produce new sentences in similar context as those from training corpus. Computed evaluation metrics against baseline BiLSTM models and human judgement scores.

EXPERIENCE

- **Google** Bangalore, India
Search and Knowledge - Software Engineer *July 2019 - Present*
 - Working in the Google Search team to streamline data validation and ingestion into Google's Knowledge Graph.
- **Microsoft Research** Bangalore, India
Undergraduate Thesis - Research Intern *Jan 2019 - June 2019*
 - CodeTalk: made profiling accessible for visual impairments by modelling Profiler data in new data structures.
 - Imitate graph visual cues as audio alerts through anomaly detection on OS resource consumption timeseries.
 - References at Microsoft Research Labs: Dr. Manohar Swaminathan, Suresh Parthasarthy and Gopal Srinivasa.
- **Goldman Sachs** Bangalore, India
Liquidity Risk - Analyst Intern *May 2018 - July 2018*
 - Built a high performance system for handling flow of large volumes of trade data.
 - Developed a React-Redux frontend for faster page load times with reduced server calls and reusable components.
- **Google Summer of Code** Remote
Fossasia - Student Developer *May 2017 - Sept 2017*
 - Refactored Open Event project to decouple logic from view templates for developing separate components.
 - Developed JSON-API compliant service with REST endpoints for serving host websites and Android apps.
 - Documented exposed endpoints with Apiary Blueprint and provided a custom shell for interacting with APIs.
 - Wrote tests to parse API documentation and validate them against the actual backend implementation.

PROJECTS

- **Event Detection using Temporal Analysis** *Prof. NL Bhanu Murthy, '18*
Prediction of events from streaming data using adjacency-matrix representations of social-network. Used Bidirectional Attention LSTM and CNNs on weighted word2vec embeddings of tweets' text to detect if an event has occurred.
- **Timeseries Prediction with SAX-DNN** *Prof. Chittaranjan Hota, '18*
Analysis and prediction of speed and vehicle count in traffic timeseries data with LSTM-Fully Convolutional Networks. Used Symbolic Aggregate Approximation to preprocess data into a symbolic representation for ingestion into neural networks.

- **Clustering with Anomaly Detection**

Prof. Aruna Malapati, '18

Mined association rules using apriori algorithm and rule generation. Compared clustering performances on datasets using divisive and agglomerative approaches. Implemented Local Outlier Factor anomaly metric for Credit Card Fraud Detection.

- **Content Management System File Search**

Prof. Aruna Malapati, '17

Implemented a file search engine for college Content Management System. Used tf-idf metric for document vectorization along with an implementation of PageRank. Hosted search engine API on Heroku which was used in an in-campus Android app.

- **Movie Recommender System**

Prof. Aruna Malapati, '17

Implemented and compared the Singular Value Decomposition and CUR methods used in developing recommender systems on the basis of the errors using Root Mean Square Error, Precision on Top k% and Spearman Correlation.

ACHIEVEMENTS

- **Microsoft Research Student Travel Grant:** Recipient of the highly competitive travel grant for presenting a publication at NAACL-SRW 2019.
- **BITS Pilani Scholarship:** Recipient of universities' merit-cum-need scholarship for all semesters.
- **Google HashCode 2019:** (team) Globally 1705th out of 6671 teams; 98th out of 957 in India
- **Goldman Sachs CodeSprint 2018:** 1st out of 730 participants in Machine Learning Challenge.
- **Microsoft Code.Fun.Do Hackathon 2018:** 1st runner up at BITS Hyderabad campus.
- **National Talent Search Exam:** (2013-2015) Awarded by NCERT, Govt. of India to 1000 students annually.

PROGRAMMING SKILLS

- **Languages:** C++, Python, JavaScript

Technologies: Git, Docker, GitHub, TravisCI

- **Libraries:** PyTorch, Scikit-Learn

Frameworks: Django, Flask, React, Redux