Vibha Masti

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master of Computational Data Science (MCDS)

December 2024

GPA: 4.33/4.00. Relevant coursework: Introduction to Deep Learning, Introduction to Machine Learning, Foundations of Computational Data Science, On-Device Machine Learning

PES University

Bangalore, India

Bachelor of Technology in Computer Science and Engineering

May 2023

GPA: 9.84/10.00. Relevant coursework: Natural Language Processing, Machine Intelligence, Data Analytics, Big Data, Network Analysis and Mining. Prof. CNR Rao Scholarship (top 2%), Immense Contribution Award

SKILLS

Programming Languages: Python (advanced), C/C++ (intermediate), Java (basic), R, SQL **ML Libraries/Frameworks:** PyTorch, TensorFlow, pandas, numpy, scikit-learn, HuggingFace

Miscellaneous: Azure ML, Git, LaTeX, Flask, FastAPI, React

EXPERIENCE

Apple

Bangalore, India

Software Engineering Intern

Jan 2023 – Jun 2023

- Trained and deployed text classification models for issue tickets in the Cellular Systems Analysis team, both in supervised and few-shot settings
- Improved on existing rule-based classification system's micro-F1 score by 35%

PES University

Bangalore, India

Teaching Assistant

Fall 2022, Spring 2023

- Network Analysis and Mining (S23) created graph ML coding assignments using networkx, PyTorch,
 PyTorch Geometric, graded 180+ final projects and assignments
- Data Analytics (F22) created visual lecture slides and notes, recorded 12 hours of lectures, designed visualization, cleaning, and model building assignments in R/Python

Goldman Sachs Bangalore, India

Summer Analyst

Jun 2022 - Jul 2022

 Designed new efficient document data models to store mathematical constraints, replacing old relational data store and reducing fetch times by 85%

NetradyneBangalore, IndiaProject InternJun 2021 – Jul 2021

 Created a web tool to visualize GPS data on an interactive map with search filters, calculated and displayed cumulative statistics at different levels of aggregation and for different geographical areas

SELECTED PUBLICATIONS

C3PO: A lightweight copying mechanism for translating pseudocode to code

Presented at the Student Research Workshop, AACL-IJCNLP 2022

GraphCoReg: Co-training for regression on temporal graphs

Best Student Paper at the 18th International Workshop on Mining and Learning with Graphs (MLG), **ECML-PKDD 2022**

Multivariate Covid-19 forecasting with vaccinations as a factor: The case of India and USA

Presented at the IEEE Region 10 Symposium (TENSYMP) 2022 and Workshop on Healthcare AI and COVID-19, ICML 2022 (Track 2)

PROJECTS

Automated Film Soundtrack Generation

PyTorch, Python

• Pipeline to generate MIDI music from valence/arousal values from movie scene using generative models

Sentiment Analysis with Streaming Spark

Python, Spark ML, sklearn

Preprocessed (cleaned, tokenized) and performed sentiment analysis on streaming data (tweets)