DISHA LAMBA

(929) 444-1550 | dl4747@nyu.edu | https://dldisha.github.io | GitHub | LinkedIn

EDUCATION

New York University, New York, NY **Sept 2021 - May 2023**
Master of Science in Computer Engineering GPA: 3.4/4
Coursework: Machine Learning, Deep Learning, Computer Vision, Big Data, Decision Optimization Models and Analytics

Bharati Vidyapeeth's College of Engineering, New Delhi, IN **Aug 2016 - Sept 2020**
Bachelor of Technology in Information Technology GPA: 8.78/10
Coursework: Data Structures and Algorithms, Operating Systems, Software Engineering, Database Management, Statistics

TECHNICAL SKILLS

Languages	Python, R, C/C++, Git, Linux, HTML/CSS
Packages and Libraries	NumPy, Pandas, Scikit-learn, Keras, Matplotlib, Seaborn, TensorFlow, NLTK
Frameworks and Tools	Flask, React, PySpark, Tableau, R Studio, MS Excel, MS Powerpoint, Google Analytics
Databases and Cloud Services	SQL, SAS, PostgreSQL, Hadoop, Apache Spark, Kafka, AWS

PROFESSIONAL EXPERIENCE

New York University New York, NY
Course Assistant Sept 2022 - May 2023
- Designated as Graduate Teaching Assistant for the **Deep Learning** Fall'22 and **Computer Networking** Spring'23 courses.
- Assisted more than 100 students with lectures, assignment queries via weekly office hours, in addition, to grading assignments.

Data Glacier New York, NY (Remote)
Data Science Intern June 2022 - Aug 2022
- Developed a **search engine** that ranks unstructured text documents based on semantic & contextual relationships to user prompts.
- Implemented scalable **ETL** pipelines using **SQL** and **Pandas** to analyze **1M** of **unstructured text data**.
- Proposed and built an ensemble of **BERT** and **TF-IDF**, capturing **80% of escalations** with a **K-S of over 48%**.
- Collaborated with the cloud team to optimize data storage and processing capabilities using **AWS S3** and **Lambda**.

Sapio Analytics Maharashtra, India (Remote)
Machine Learning Engineer July 2020 - June 2021
- Led development of **job-search portal** for the **Govt. of India**, resulting in **1.2M** blue-collar job opportunities for Indian laborers.
- Implemented **ETL** pipeline using **SQL SSIS** to automate data loading process; improved data quality & processing time by **17%**.
- Utilized **KNN** algorithm to match jobs based on user skillset and location, resulting in **50% increase in job placements**. By integrating the machine learning model with **ElasticSearch**, achieved job-matching **accuracy** of **85%**.
- Devised **A/B experiments** with Product & Engineering teams to validate recommendations using **Google Analytics**.

PROJECTS

Options Trading Analysis Dashboard (MS Excel, Tableau) Jan 2023 - May 2023
- Developed interactive dashboard using **MS Excel, Tableau** to analyze data & visualize performance of a **100+ options trades**.
- Leveraged **Monte Carlo Simulation** to model various market scenarios like risk assessment, decision-making.
- Analyzed trading performance metrics, resulting **20%** increase in overall profitability, **15%** improvement in risk-reward ratios.

Dialogue-based Interactive Facial Editing System via Reinforcement Learning (PyTorch, NLP) Sept 2022 - Dec 2022
- Implemented dialogue-based facial editing system using **PyTorch** - reinforcement learning, allows users to specify the desired facial editing effect in a natural language and interactively accomplish the goal via multimodal dialogue with system feedback.
- To track user intention and maximize user's long-term rewards; employed **policy gradient**-based algorithm **REINFORCE**.

Movie Recommendation System (Python, PySpark) Jan 2022 - May 2022
- Performed **exploratory and statistical data analysis** on the **27M** MovieLens dataset using **PySpark** and **Pandas**.
- Built a predictive recommender system using **collaborative filtering** and **Apache Spark's ALS**. Through a comparative study with Python **LightFM** and **Annoy** libraries, fine-tuned its performance to provide top 5 movie recommendations.
- LightFM outperformed the ALS method with an **MSE** score of **0.77** and a **runtime** of **95.12 seconds**.

Plasma Desk web app (ExpressJs, HTML/CSS, Firebase, AWS - ElasticSearch, Heroku) Aug 2020
- Developed JS web app, driven by doctors, connecting eligible plasma donors with Covid patients, based on compatibility.
- The project received **Best Medical Hack** and **Wolfram Award for Top 30 Hacks** in the *MHacks 13 Beta Hackathon 2020*.

PUBLICATION

- Proposed an integrated system for Occupational Category Classification based on Resume and Job Matching that achieved an **accuracy of 83.5%**, published in *International Conference on Innovative Computing & Communication*, May 2020.