### **DISHA LAMBA**

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#### **EDUCATION**

New York University, New York, NY

Sept 2021 - May 2023

MSc Computer Engineering

Coursework: Machine Learning, Deep Learning, Big Data, Decision Models and Analytics, Network Security

Bharati Vidyapeeth's College of Engineering, New Delhi, IN

Aug 2016 - Sept 2020

Bachelor's of Technology Information Technology

GPA: 3.4

GPA: 3.5

## TECHNICAL SKILLS

Languages Python, R, C/C++, JavaScript, Git, Linux, HTML/CSS

Packages and Libraries NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, PyTorch, TensorFlow, Keras, dplyr, NLTK

Tools & Frameworks React.js, Ruby on Rails, Tableau, MS Excel, AWS, GCP, Kanban

**Databases** SQL, PostgreSQL, Hadoop, PySpark, DynamoDB

### PROFESSIONAL EXPERIENCE

New York University
Course Assistant

New York, NY
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.

- Mined unstructured text data of **1M incidents in SQL** server to generate Document-Term-Matrix with TF-IDF weights.
- Proposed and built an ensemble of BERT and TF-IDF, capturing 80% of escalations and achieving a MAP score of 80.3%.

Sapio Analytics Machine Learning Engineer Maharashtra, IN (Remote) July 2020 - June 2021

- Spearheaded development of a job-search web app for the **Govt. of India**, resulting in **1.2M blue-collar jobs** to Indian laborers.
- Analyzed 27M of supply chain data, generated DQIs using Informatica, and built changes to enhance the data quality by 17%.
- Designed & Developed a job-search platform using TensorFlow that utilized KNN algorithm to match laborers' skill sets with industry requirements; generated a 50%+ increase in job placements for unemployed blue-collar workers during Covid.
- Incorporated the KNN model into ElasticSearch to enhance job matching accuracy, resulting in an 85% accuracy rate.
- Collaborated with the SDE team to seamlessly integrate ML model with frontend using React to effectively display job matches.

## **PROJECTS**

#### Movie Recommendation System (Python, PySpark)

Jan 2022 - May 2022

- Analyzed & processed 27M records of movie-user information in PySpark, and leveraged Python-Seaborn to plot graphs.
- Implemented collaborative filtering movie recommendation model using Spark's ALS algorithm to suggest top 10 movies based on genres. Conducted a comparative analysis of the baseline model's performance with Python libraries LightFM and Annoy.
- Achieved superior results using LightFM over ALS method, with an MSE score of 0.77 and computational time of 95.12 sec.

# Dialogue-based Interactive Facial Editing via Reinforcement Learning (PyTorch, NLP)

Jan 2022 - May 2022

- Implemented a dialogue-based facial editing system using reinforcement learning that allows users to specify the desired facial editing effect in a natural language and interactively accomplish the goal via multimodal dialogue with system feedback.
- Devised quantitative & qualitative experiments to validate system performance, with 80% of participants favoring model results.

#### Plasma Desk web app (ExpressJs, HTML/CSS, Firebase, AWS - ElasticSearch, Heroku)

Aug 2020

- Created JS web app, driven by doctors, that connects an eligible plasma donor with a Covid patient, based on compatibility.
- Received Best Medical Hack and Wolfram Award for Top 30 Hacks in the MHacks 13 Beta Hackathon 2020 for the project.

#### **PUBLICATION**

Paper titled 'An Integrated System for Occupational Category Classification based on Resume and Job Matching' published in International Conference of Data Analytics & Management, Springer, June 2020 [Paper link]

### **ACHIEVEMENTS**

• Vice President at NYU Machine Learning Club

Jan 2023

• 100% Grant Recipient for attending Strange Loop Conference 2022 in St. Louis, Missouri

Sept 2022

3rd position in CSAW 2021 Cyber Security Games & Conference Hack3D competition.

Nov 2021