# **DISHA LAMBA**

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#### **EDUCATION**

### New York University, NY, USA

Sept 2021 - May 2023

Master of Computer Engineering

Relevant Coursework: Machine Learning, Deep Learning, Statistics, Big Data, Decision Optimization Models & Data Analytics Academic Achievements: A+ in all Machine Learning courses, Tandon Summer Scholar'21, Academic Merit Scholarship Course Assistant: Deep Learning, Computer Networking

### Guru Gobind Singh Indraprastha University, Delhi, India

Aug 2016 - Sept 2020

Bachelor of Technology in Information Technology

### TECHNICAL SKILLS

**Programming & Libraries:** Python, R, React.js, Flask, PySpark, NumPy, Pandas, Scikit-learn, Keras, Matplotlib

Machine Learning: PyTorch, NLTK, Feature Selection, Regression, Clustering, Time Series Analysis, Decision Trees

**Databases and Analysis:** MySQL, Hadoop, SAS, Splunk, Tableau, PowerBI, MS Suite (Excel, Powerpoint) **Cloud Services & Tools:** Airflow, Amazon Web Services (S3, Lambda, ElasticSearch), Docker, Git, Linux

Quantitative Analysis: Risk Management, Portfolio Optimization, Statistical Analysis, Deterministic and Probabilistic Models

#### PROFESSIONAL EXPERIENCE

## Subconscious AI, New York City, NY | Research Intern

June 2023 - Present

- Utilized WandB, Python for data visualization and analysis, to track ML experiments in Generative AI studies on human behavior.
- Achieved 95% effectiveness in filtering inappropriate experiment prompts using OpenAI Hate-Speech API & pytest for validation.

#### Data Glacier, Remote | Data Science Intern

June 2022 - Aug 2022

- Developed a **search engine** that ranks unstructured text documents based on semantic and contextual relationships to user prompts.
- Designed ETL pipelines using SQL and Pandas to analyze a large dataset of 1M unstructured text data.
- Attained 48% K-S and captured 80% of escalations by using BERT and TF-IDF ensemble model.
- Led collaborative efforts to enhance data storage and processing capabilities via AWS S3 and Lambda.

## Sapio Analytics, Mumbai, IN | Machine Learning Engineer

July 2020 – June 2021

- Generated 1.2M job opportunities nationwide by spearheading the development of job-search portal for the Government of India.
- Improved data quality and processing speed by 17% using SQL Server Integration Services (SSIS) and automation.
- Achieved 85% accuracy in user-job matching, boosting job placements by 50% by using K-nearest neighbor algorithm.
- Integrated ML model with **React.js**, resulting in **25% increase in web user engagement** and insights into behavioral analytics.
- Devised A/B experiments with Product and Engineering teams for data-driven decision-making and product testing.

# PROJECTS AND PUBLICATIONS

### **Portfolio Optimization Suite (MS Excel, Tableau)**

Jan 2023 - May 2023

- Utilized MS Excel Solver to refine deterministic model for portfolio allocation, maximizing potential returns while minimizing risks.
- Enhanced projected return on investments by 15% using **Monte Carlo Simulation**, offering insights into optimal asset diversification.
- Created Tableau dashboards to visualize asset allocation, return rate predictions, and KPI metrics for informed investment decisions.

# Movie Recommendation System (PySpark)

Jan 2022 - May 2022

- Conducted in-depth exploratory and statistical analysis on a 27M-record MovieLens dataset, using Pandas and PySpark.
- Built a predictive movie recommender system using **collaborative filtering** and ALS algorithm. Compared performance against **Python LightFM and Annoy (ANN)** models, optimizing the system to deliver top 3 movie recommendations.
- Achieved superior performance with the ANN model, with an **MSE score of 0.77** and runtime of 3ms per loop.

# Integrated System for Occupational Category Classification of Resumes (Python, NLP) - Research Paper

- Developed **NLP model** to automate resume screening, reducing recruitment time & categorizing candidates into occupational fields.
- Utilized tokenization, segmentation techniques to pre-process resume data, enabling essential skills extraction and matching.
- Achieved accuracy rate of 83.5%, co-authored the paper at the International Conference on Innovative Computing, May 2020.

## ACHIEVEMENTS AND LEADERSHIP

- Secured **3rd position** in Cybersecurity and Games Hack3D'21 competition.
- Won **Best Medical Hack** at **MHacks 13** hackathon; created a JS web app to match COVID-19 patients with plasma donors.
- Former Vice President, NYU Machine Learning Club: Catalyzed machine learning interest in 30+ students.
- Attendee at Grace Hopper Celebration'23 (GHC), Strange Loop'22 Conference (Funded).
- Active Member: Girls Who Code (GWC), Rewriting The Code (RTC), Society of Women Engineers (SWE)