DISHA LAMBA

New York, USA

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EDUCATION

New York University | New York, USA — **Sept 2021 - May 2023**
MSc Computer Engineering — GPA: 3.5
Relevant courses: Machine learning, Deep learning, Big data, Network Security

Bharati Vidyapeeth's College of Engineering | Delhi, India — **Aug 2016 - Sept 2020**
Btech Information Technology — GPA: 3.3

TECHNICAL SKILLS

Languages: Python, R, C/C++, JavaScript, Git, Linux, HTML/CSS
Tools and Frameworks: NumPy, Pandas, Scikit-learn, Seaborn, Matplotlib, Tableau, PyTorch, TensorFlow, React.js, Ruby on Rails
Databases: MySQL, PostgreSQL, MapReduce, PySpark, DynamoDb

PROFESSIONAL EXPERIENCE

NYU Tandon School of Engineering | Course Assistant | *Brooklyn, NY* — Sept 2022 - Present
- Graduate Teaching Assistant for the Deep Learning course co-taught by Prof. Chinmay Hegde and Prof. Arsalan Mosenia.
- Assisting students with queries regarding lectures, assignments, and projects in addition to grading assignments and projects.
- Conducting weekly office hours encouraging lecture and project discussion amongst students for a cohort of 50 students.

Data Glacier | Data Science Intern | *New York (Remote)* — June 2022 - Aug 2022
- Developed a search engine that ranks unstructured text documents based on semantic & contextual relationships to user prompts.
- Proposed and built an ensemble of BERT & TF-IDF on MS Macro dataset, achieving MAP of 82.3%.

Sapio Analytics | Machine Learning Engineer | *Maharashtra, India (Remote)* — July 2020 - Jan 2021
- Designed a deep learning model using TensorFlow that maps the skill set of laborers with those of industry requirements across Pan-India to help them with blue-collar jobs during covid. Deep-KNN was used as a matching algorithm.
- Extracted and analyzed specific data for both industry-labor demand-supply using Python, SQL to understand industry demand.
- Developed and analyzed Tableau reports and dashboards of over 20M records using PySpark ETL scripts and hive tables.
- Integrated TensorFlow model with frontend using ReactJs to display state-wise job requirements, industry analysis, and matches.
- Initiated web application for the Govt. of India to provide 1M blue-collar jobs to Indian migrant laborers.

inDDev | Software Developer Intern | *Haryana, India* — June 2019 - July 2019
- Designed and implemented the frontend and backend architecture of a Content Management System(CMS) using Ruby on Rails.
- Implemented version-controlled environment in CMS; allows the admin to safeguard any changes and roll back when necessary.

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)**

PROJECTS

Movie Recommendation System using PySpark
- Studied over 27 million records of movie-user information, and leveraged Tableau to plot graphs, and clean data in PySpark.
- Implemented a 'collaborative filter-based' movie recommendation system using Spark's ALS method, compared it with that of a baseline model as well as with single-machine implementation (LightFM) and Annoy(Approximate Nearest Neighbors).
- Tested each model for overall performance using accuracy metrics like precision at k, NDCG, MAP, and RMSE.
- Single-machine implementation performed better than the ALS method with a test MAP of 0.057 and 145.12sec to fit the model.

Dialogue-based Interactive Facial Editing via Reinforcement Learning
- Developed 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.
- To track user intention and maximize user's long-term rewards; employed policy gradient-based algorithm REINFORCE.
- Proposed a new user simulator with human evaluation to verify if the simulator can successfully simulate real user behaviors.

Plasma Desk web app - ExpressJs
- Developed Js web app, driven by doctors, that connects an eligible plasma donor with a Covid patient, based on compatibility.
- The project won the **Best Medical Hack** and **Wolfram Award for Top 30 hacks** in MHacks 13 Beta Hackathon 2020.

ACHIEVEMENTS

- **100% grant recipient** for attending **Strange Loop Conference'22** in St. Louis, Missouri — Sept 2022
- **3rd position in CSAW'21** Cyber Security Games & Conference Hack3d competition. — Nov 2021