POOJA ARYAMANE

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EDUCATION

MS in Data Science, May 2024
New York University, Centre of Data Science, New York, NY
Relevant Coursework: Introduction to Data Science, Programming for Data Science, Optimization and Computational Linear Algebra

MS in Applied Statistics and Data Analytics, June 2022 **(CGPA: 3.86/4.0)**
NMIMS University, Mumbai, India
Relevant Coursework: Generalized Linear Modelling, Statistical Computing in Python and R, Data Mining, Machine Learning

BS. Applied Statistics and Data Analytics, June 2020 **(CGPA: 3.74/4.0)**
NMIMS University, Mumbai, India
Relevant Coursework: Probability Theory, Discrete Mathematics, Multivariate and Univariate Calculus

TECHNICAL SKILLS

Python, R, Base SAS, C++, Swift, HTML | SQL, SPSS | Tableau, SAS VA, Scilab | Machine Learning, Deep Learning

PROFESSIONAL EXPERIENCE

New York University | *Course Assistant; Regression II Categorical Data Analysis* **September 2022 – December 2022**
Enabled students to understand the course material and facilitated the preparation of new content.

Indian Institute of Technology Bombay (IITB) | *Machine Learning Researcher* **March 2021 – July 2022**
- Collaborated with the Machine Learning team to develop a tool that automates the digitalization of documents using computer vision and deep learning.
- Achieved an overall accuracy of **89%** for OCR, and an mAP of **91%** for document layout detection
- Built and evaluated state-of-the-art deep learning architectures using **Tensorflow, Pytorch, and Detectron2 in Python**.

Sutherland Global, Mumbai, India | *Analytics Division Intern* **May 2019 – July 2019 | July 2020 – August 2020**
- Collaborated with the analytics team to implement and deploy a predictive **logistic regression** model to identify fraudulent ticket sales for a major commercial airline.
- Devised a pipeline for data cleaning, feature building, and modelling using **R**, achieving an accuracy of **96%** on monthly ticket sales.
- Presented an outcome report, detailing detailed a potential monthly reduction in revenue loss of **25%** on model deployment.

SELECTED PROJECTS

Empty Space Detection for Inventory Management
- Optimized inventory management in retail stores by developing an interface designed to alert store managers on stock-outs, powered by deep learning and computer vision; achieving an mAP of 82%.
- Developed a robust object detection algorithm to detect empty spaces for restocking using the Faster-RCNN architecture.

Sign Language Recognition using Hidden Markov Models
- Built an algorithm to convert the hand and face movement during sign language (ASL) into English words to enhance communication between hearing and non-hearing individuals.
- Utilized Hidden Markov Models and deployed the algorithm in real-time.

Real-Estate Data Modelling Using Structural Equation Models
- Modelled **50** features that affect real-estate pricing in Mumbai, India by analysing their combined and individual impacts.
- Collaborated with a small team to analyse an extensive, 10GB dataset provided by JM Financial Real-Estate using SQL and developed a Structural Equation Model, predicting property value based on various factors with an accuracy of **92%**.

LEADERSHIP AND ACHEIEVEMENTS

Positions of Responsibility
- Co-Director of Events in the Graduate Community Student Building Group at New York University. [2022]
- Head of Marketing in the Student Council at NMIMS University. [2021-2022]
- Events Member of the Entrepreneurship Cell at NMIMS University [2020-2021]

Academic Achievements
- Winner of a 24-hour hackathon, DigiHack 202, organized in NMIMS University.
- Completed AI for Medical Diagnosis Online – DeepLearning.AI 2020