AASTHA TANDON

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Education

California State University - East Bay

M.S. in Business Analytics (Machine Learning & Data Science) | GPA: 3.96/4.0   **August 2022 - May 2024**

Relevant Coursework: Text Mining, Deep Learning, Big Data, Data Mining, DBMS, Data Warehousing & BI

University of Delhi, India

M.Sc in Operational Research   **August 2015 - May 2017**

University of Delhi, India

B.Sc in Computer Science   **August 2011 - May 2014**

Technical Skills

Languages: Python, R, SAS, SQL,Java, C++, LaTeX

ML Frameworks/Others: PyTorch, Tensorflow, Keras, Scikit-learn, Pandas, Numpy, NTLK, MYSQL, S3, Matplotlib, Tableau, PowerBI, Azure, BigQuery, AWS, MongoDB, OpenCV, Git, MapReduce, Hive, Pig, Hadoop, Spark

Experience

California State University - East Bay

Research Assistant (Advisor: Prof. Surendra Sarnikar)   **June 2023 – Present**

- Developed python scripts to gather job requirement data through web scraping using BeautifulSoup, improved existing process efficiency by 65%
- Utilized OpenAI's LLM GPT-3.5 Turbo language model to structure scraped data by employing prompt engineering
- Conducted LDA,BERT and topic modeling using LLM to identify in-demand skills, included 40% model recommended topics in the curriculum

Student Assistant - Tutor   **January 2023 – May 2023**

- ITM - 300 (Information Technology Management) and ITM - 330 (Business Applications Programming)

UnitedHealth Group - Associate Data Analyst

Associate Data Analyst   **April 2019 – June 2021**

- Developed ML models to prevent customer churn in UHG healthcare plans, increasing customer retention by 15%.
- Implemented ensemble models for early detection of recurrent breast cancer, improving accuracy by 20%.
- Built multi-headed NN model to estimate joint occurrence of Type 2 Diabetes and Cardiovascular diseases based on patient's past medical history, resulting in a 30% increase in accuracy.

Complete HEOR Solutions (CHEORS)

Senior Data Analyst   **June 2017 – March 2019**

- Conducted data analysis on treatment patterns of multiple diseases and identified opportunities to launch new drugs.
- Developed data-driven recommendation engines to promote medication resulting in projected sales growth of 10%.
- Published poster **"Costs and Healthcare Resource Utilization for Cervical Conization in Mid-Adult Women in the United States"** in EUROGIN, 2018.

Academic Projects

Breast Cancer Detection in Histopathology Images

- Developed efficient CNN models with MobileNet and ResNets as backbone to detect cancer in histopathology images.
- Utilized dataset from Kaggle and proposed models achieved high accuracy and AUC of 88%.

Topic Modeling on Disneyland Reviews

- Implemented LDA models to construct topics contributing to both positive and negative feedback.
- Concluded topics across different locations and extracted actionable insights to improve customer experiences.

Wikipedia Toxic Comment Classification

- Developed ML models like Binary Relevance, Chain Classifier, LSTM to predict different types of toxicity in comment.
- Used TFIDF as feature embedding with Logistic regression and Glove embedding with LSTM.

Awards and Certifications

- **SAS Global Certification** with score of 92%.
- Received several **Bravos** for Excellent Performance, Innovation, and Cross functional teamwork at UnitedHealth.
- **Excellence Award** for teamwork and ownership at CHEORS.