Revanth Parsa

revanth.06parsa@gmail.com revanthparsa revanthparsa

Experience

Dhurin **Jul'22 – Present**

Business Analyst

- Empowered client insights by cross-referencing customer data with a government-sourced master database, enhancing understanding of the customer base

Indian Private Sector Bank 2 (Dhurin Client) **Jan'24 – Present**

Consultant

- Developed a **recovery propensity machine learning model** to predict the likelihood of payment from customers in the written-off pool, achieving a **3.5x to 5x** lift in the best decile compared to the overall event rate
- Created a comprehensive dataset using both on-us and off-us customer credit history to equip field collection agents with tailored talking points tied to each customer's recovery propensity
- Designed a **rule-based roll-forward model** to predict customers at risk of missing the next month's EMI payment
- Built a multi-class classification model to predict whether customers in the current data pool of 2 consecutive missed EMIs are likely to pay one EMI or pay more than one EMI in the next month
- Applied **XGBoost and Random Forest** algorithms to build recovery propensity and multi-class classification models
- Implemented monthly monitoring of live models using CSI and PSI metrics for ongoing accuracy and stability checks
- Migrated 5+ SAS codes to PySpark on AWS SageMaker, improving execution speed by **75%** and minimizing manual effort through distributed computing
- Automated the monthly execution of recovery propensity models by creating Airflow DAGs for **7** products, reducing execution time and manual effort by **90%**

Indian Private Sector Bank 1 (Dhurin Client) **Jul'23 – Dec'23**

Consultant

- Analyzed delinquency data consistency across internal records, NBFC data, and credit bureau reports
- Analyzed and estimated the expected lifetime of different retail portfolios by fitting probability distributions to monthly closure data, determining the average cohort lifetimes over 12 months for concise portfolio estimations
- Key contributor in converting 10+ vintage R codes to Python, with detailed comparisons and documentation

Education

Indian Institute of Technology, Jodhpur **Sep'20 – May'22**

Master of Technology in Artificial Intelligence ***CGPA: 7.95*** *Jodhpur, India*

Indian Institute of Technology, Guwahati **Jul'15 – May'19**

Bachelor of Technology in Electronics and Communication Engineering ***CGPA: 6.92*** *Guwahati, India*

Projects

Multimodal Knowledge Graph Embeddings | *Report*

- Conducted a comprehensive study about the embedding techniques used for entities and relations in a knowledge graph
- Performed link prediction tasks on the multi-modal knowledge graph using **3** different embedding techniques

Identifying Name of the Singer from Audio Data | *Report*

- Compiled a dataset of **500 songs** from **10 artists**, converting MP3 files to WAV format for consistent audio processing
- Processed audio files to generate **9,000+** spectrograms and mel-spectrograms from 30-second (4–6 per file) clips for feature extraction
- Leveraged three pre-trained CNN models VGG16, ResNet50, InceptionV3 to extract features from the spectrograms
- Trained an XGBoost classifier on 7,000+ samples, achieving **70%** accuracy with single predictions and over **93%** accuracy with top-3 predictions

Relevant Coursework

- Machine Learning
- Deep Learning
- Responsible and Safe AI
- Natural Language Processing
- Computer Vision
- Artificial Intelligence
- Data Analytics

Technical Skills

Languages: Python, R, C, PySpark
Frameworks: PyTorch, TensorFlow, Keras, Scikit-Learn
Libraries: NumPy, Pandas, Statsmodels
Databases & Cloud Technologies: MySQL, Amazon S3, Amazon EC2, Amazon SageMaker