RAVISANKAR CHENGANNAGARI

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EDUCATION

MERCY UNIVERSITY, New York, US
Master of Science in Computer Science (Specialization: Data Science) ***DECEMBER 2025***
LOVELY PROFESSIONAL UNIVERSITY, Punjab, India
Bachelor of Technology in Computer Science and Engineering (Specialization: Machine Learning) ***AUGUST 2022***

SKILLS

Machine Learning & AI: *LLMs, Transformers, Hugging Face, TensorFlow, Scikit-learn, XGBoost, LightGBM, NLP, CNNs, RNNs, Predictive Modeling, Feature Engineering, Hyperparameter Tuning*
MLOps & Deployment: *Docker, MLFlow, Flask, FastAPI, Streamlit*
Cloud & Big Data: *AWS (EC2/S3/SageMaker), Hadoop, Spark, SQL, ETL Pipelines*
Data Analytics: *Statistics, Probability, Time Series Forecasting, Bayesian Inference, PCA, Hypothesis Testing*
Programming: *Python, Java, JavaScript*
Visualization: *Matplotlib, Seaborn, Plotly, Folium*
Other Skills: *Data Structures, HTML, CSS, Git, GitHub*

EXPERIENCE

COGNIZANT TECHNOLOGY SOLUTIONS: *Programmer Analyst* | Bengaluru, Karnataka, India ***JUN 2022 – NOV 2023***
(Converted from Intern to Full-time based on performance)

- Architected end-to-end **ML pipelines** and deployed containerized models using **Docker** and **Flask**, significantly improving production scalability and reliability.
- Engineered predictive models (**XGBoost**, **TensorFlow**) for classification and forecasting, achieving a **20-30% accuracy boost** through rigorous hyperparameter tuning.
- Automated large-scale **ETL workflows**, reducing manual data intervention by **40%** and enabling real-time model retraining cycles.

COGNIZANT TECHNOLOGY SOLUTIONS: *Intern* | Remote ***JAN 2022 – JUN 2022***

- Developed proof-of-concept ML models, including **NLP**-based sentiment analysis and recommendation prototypes, to validate predictive capabilities.
- Conducted **Exploratory Data Analysis (EDA)** and advanced feature engineering (imputation, scaling) using **Pandas** and **Seaborn** to optimize model accuracy.

MERCY UNIVERSITY: *Student Teaching Assistant* | Dobbs Ferry, New York, United States ***FEB 2025 – DEC 2025***

- Mentored students in **Python**, **Java**, and **Data Structures** (OOP) while providing 1:1 debugging support for complex algorithms and grading assignments to improve code efficiency.

ACADEMIC & INDEPENDENT ML PROJECTS

PERSONALIZED NEWS RECOMMENDATION SYSTEM [View GitHub Repo**]** ***DEC 2025***

- Architected a **Hybrid Recommendation Engine** on the MIND dataset, unifying **SVD** and **Word2Vec** to mitigate the "Cold Start" problem for **156k+** user impressions.
- Developed a **Neural Transformer (NRMS)** with Multi-Head Attention, achieving **0.65 AUC** (90% of SOTA) and outperforming 8+ benchmarks (RNN, LSTM) in computational efficiency.

EMOTION CLASSIFICATION IN TWITTER MESSAGES [View GitHub Repo**]** ***OCT 2025***

- Fine-tuned a **DistilBERT Transformer** achieving **94.1% accuracy** on **416k tweets**, outperforming 7+ benchmarks (**Bi-LSTM**, SVC) and boosting recall for imbalanced classes.
- Deployed the model as a scalable **Flask web application** for real-time inference, optimizing training pipelines with **TF-IDF** vectorization and custom tokenization.

CREDIT APPROVAL PREDICTION [View GitHub Repo**]** ***MAY 2025***

- Architected a credit risk scoring model using **LightGBM** on **1.4M+** records, achieving **0.85 ROC-AUC** and automating manual loan approval processes.
- Solved severe class imbalance (90%) using **SMOTE** and engineered predictive features (Log-Transform) to improve recall and boost model stability by **~15%**.

CERTIFICATIONS

Artificial Intelligence Engineer (Simplilearn), Machine Learning (Simplilearn), Deep Learning with TensorFlow (IBM), Data Science with Python (Simplilearn), Competitive Programming (Cipher Schools), Web Development Bootcamp (Udemy)