Om Prakash Chaubey

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LinkedIn — GitHub — Kaggle

Experience: Fresher (0 Years) — Actively Seeking Internship/Entry-Level Opportunities

Professional Summary

Motivated Computer Science undergraduate passionate about data science, machine learning, and predictive modeling. Strong foundation in building and evaluating ML models, applying statistical methods, and creating interactive data visualizations through hands-on projects. Eager to apply practical skills in Python, R, SQL, and neural networks to generate insights and solve real-world problems within a collaborative, data-driven team.

Technical Skills

ML/AI/Data Science: XGBoost, TensorFlow, PyTorch, Keras, Scikit-learn, Random Forest, Isolation Forest, SMOTE
Statistics & Analysis: Statistics, Predictive Modeling, Pandas, NumPy
Visualization: Matplotlib, Seaborn, Streamlit
Programming Languages: Python, R, SQL, C++, JavaScript, C
Optimization & Tools: TOPSIS Algorithm, Linear Programming (PuLP), Git, Docker, Flask

Technical Projects

Anomaly Detection in Network Traffic 2025
Machine Learning & Security Analytics *Patiala, India*

- Engineered a hybrid classification model integrating **Isolation Forest** decision functions with a **Random Forest** classifier, utilizing **SMOTE** oversampling to effectively handle minority attack classes.
- Evaluated on the UNSW-NB15 dataset, achieving 95% Accuracy, 0.96 F1-Score, and perfect 1.00 Precision, with cross-testing on CIC-IDS2017 to analyze domain adaptation challenges.

E-Commerce Data Analysis & Prediction Dashboard 2025
Predictive Modeling & Data Visualization *Patiala, India*

- Trained and optimized an **XGBoost** machine learning model for predictive analytics, achieving ˜90% overall accuracy and significantly improving recall from 54% to 82%.
- Built an interactive **Streamlit** dashboard to visualize key business KPIs, tracking an Average Order Value of INR 158 and identifying critical delivery delays alongside seasonal sales peaks.

Emotion Recognition with Deep Learning 2025
Deep Learning & Predictive Modeling *Patiala, India*

- Developed a robust convolutional model achieving 85.75% accuracy on held-out test data by implementing data augmentation strategies, including noise addition and pitch shifting.
- Diagnosed real-world acoustic domain mismatches using live microphone demonstrations, establishing a data-collection blueprint for commercial-grade model re-training.

TOPSIS Ranking Framework for NLP Models Feb 2025
Mathematical Optimization & Statistical Analysis *Patiala, India*

- Implemented the **TOPSIS** algorithm in Python to evaluate and rank pre-trained NLP models (BERT, RoBERTa, DistilBERT) based on multi-criteria metrics including Cosine Similarity, Accuracy, Inference Time, and Model Size.
- Engineered an automated pipeline utilizing NumPy and Pandas to compute weighted normalizations and Euclidean distances, generating ranked CSV exports and visual bar charts.

Education

Thapar Institute of Engineering and Technology Aug 2023 – May 2027 (Expected)
Bachelor of Technology in Computer Science and Engineering *CGPA: 7.18/10.0*

Certifications & Competencies

Certifications: Google AI Specialization (Coursera), NVIDIA: Fundamentals of Deep Learning, Deep Learning with PyTorch, Transfer Learning for NLP with TensorFlow Hub, Generative AI & Machine Learning with PySpark
Soft Skills: Analytical Problem Solving, Agile Collaboration, Technical Communication
Languages: **English** (Professional), **Hindi** (Fluent), **Nepali** (Native)