ANUP PATEL

SUMMARY

Data Scientist with 4 years of expertise in NLP, Generative AI, and advanced statistical modeling. Specializes in developing deep learning and time series models that drive innovations generating over \$100M annually. Committed to advancing AI technologies and their strategic application to deliver substantial business impact and optimize complex systems.

WORK EXPERIENCE

Engineering Analyst - Trust & Safety

Jan 2025 – Present Hyderabad, India

June 2023 - Jan 2024

Google

• Part of Trust and Safety Team at Google to Keep Platform Safe.

Lead Data Scientist

FIS Global (Fidelity Information Services)

Bengaluru, India

• AI-Driven Incident Resolution and Proactive Detection: Led a Generative AI and LLM-based initiative that reduced Mean Time to Repair (MTTR) by 65%, saving millions of dollars annually and boosting operational efficiency.

Senior Data Scientist

May 2022 - April 2023

Unacademy

Bengaluru, India

- Enhanced Lead Scoring System at Unacademy: Improved the lead scoring system using Classical Modelling (Random Froestr, Xgboost model), optimizing feature engineering and hyperparameter tuning, which led to a recall score exceeding 98%.
- Developed Proctoring Solution for Relevel by Unacademy: Engineered a real-time proctoring solution using YOLOv4 for object detection, integrated with OpenCV and TensorFlow for video processing. Achieved over 97% accuracy while processing over 1,000 videos within hours, leading to annual savings of more than 10 million INR.

Data Scientist 2 - AI Specialist, Product Development and Innovation

Aug 2020 - April 2022

Mastercard, AI Garage

Gurugram, India

- Risk and Revenue Modeling: Developed AI-based risk scores (e.g., Merchant Activity Risk, Anomalous Time of Day) using time series analysis and classical models. Built revenue prediction models with less than 3% error at issuer level by combining classical and deep learning methods, aiding customer segmentation and business planning.
- Server Failure and Transaction Embeddings: Worked on MIPs Server Failure Prediction using Autoencoders and clustering, achieving 70% precision to reduce downtime and losses.
- Risk Optimization and Decision Support: Formulated acquirer strategies using the Risk-Reward concept to maximize profitability while minimizing exposure. Built a dashboard offering merchant recommendations based on acquirers' risk-reward profiles.
- Designed and implemented a robust ML pipeline using Hive, Impala, and PySpark, streamlining the workflow and enhancing efficiency.

Data Science Intern

May 2019 - July 2019

Airtel X Labs

Bengaluru, India

• Designed and implemented predictive models using Random Forest, XGBoost, and neural networks to enhance customer acquisition, retention, and revenue. Key achievements include accurately predicting and recommending Amazon Prime acquisitions for Airtel users with over 85% accuracy, deploying advanced churn prediction and offer suggestion systems, achieving retention accuracy exceeding 90%.

EDUCATION

Master of Technology $(M.Tech) \mid$ Computer Science and Engineering Indian Institute of Science (IISc)

Aug. 2018 – June 2020 Bengaluru, India

TECHNICAL SKILLS

Data Science: Machine Learning, Model Development, Model Validation, Quantitative analysis, Financial modeling, Fraud Monitoring, Risk management, Generative AI, LLM (Large Language Models), Time Series Forecasting, Sequence Modelling, Predictive Modelling, BERT, GPT, LLM Fine tuning, Transformer, ML Pipeline, Natural Language Processing (NLP), Deep Learning, Python, Data visualization, Tensorflow, Keras, PySpark, Pytorch, Hive, Graphs, Data Mining, Neural Network, Support Vector Machine, Data Mining, Classification Algorithms, Regression, Xgboost, Catboost, Random Forest, Logistic Regression, RNN, LSTM, Predictive Learning

Programming: Python (NumPy, SciPy, Matplotlib, Pandas, Scikit Learn), C, C++

Finance: Financial Services, Fraud Detection, Risk Scores, Data Analysis

designing the website, event logo and posters, flyers and banners.

Others: Linux, Flask, Nifi, Kafka, Flink, SQL, Hive, Impala, Airflow, Hadoop, AWS, Git, Statistics, Probability, A/B Testing, Software Development, Automation, A/B Testing

ACHIEVEMENTS

- Achieved first place in Unacademy's Regenerate Hackathon on Generative AI, earning a prize of INR 1 lakh in recognition of my efforts and innovation.
- Secured All India Rank 142 (99.87 percentile) in Computer Science among 1 Lac+ students.
- Secured All India Rank 2 in ISRO SC Written Test.
- Gold Medalist in B.Tech (2013-2017) for Outstanding Academic Performance.

VOLUNTEER EXPERIENCE

Mentoring Students for Higher Education & Career Advancement Guiding students for higher education and career advancement since August 2021	Aug 2021 - Present
Placement Coordinator at IISc, CSA Department Responsible for all communication between Institute and Companies	Aug 2019
Volunteer at CSA Summer School, IISc Responsible for interviewing candidates from various institutes and selecting good candidates to attend CSA summer school	July 2019
Design Team Lead Led the Design Team for the Open Day event held on 23rd March, 2019. Responsible for	Feb 2019