Chirag Palan

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ML Engineer | Data Scientist

SUMMARY

Results-oriented AI/ML Engineer & Data Scientist with over 4 years of experience in developing and deploying enterprise-scale ML models in financial services. Proven expertise in predictive analytics and MLOps, achieving a 10% revenue uplift on deposit portfolio in key market and reducing model risk. Skilled in Python, SQL, and deep learning techniques, with a strong track record in cross-functional collaboration and driving data-driven solutions.

KEY SKILLS

Business & Stakeholder: Problem scoping, requirement gathering, strategic decision-making, and aligning with business objectives
Solution Design & Delivery: Designing end-to-end ML/AI/Data driven solution frameworks, roadmap planning, project management
Cross-Functional Leadership: Collaborating with Risk, Business, Product, and Engineering teams; guiding and mentoring
Model Oversight & Governance: Performance tracking (OOT, drift, KPIs), continuous monitoring, and ensuring compliance with model governance and Responsible AI standards

TECHNICAL SKILLS

Programming & Data Engineering: Python (NumPy, Pandas, Scikit-learn, TensorFlow/Keras), SQL, PySpark, data wrangling, feature engineering, ETL pipelines, API integrations, Dataiku
Machine Learning & Deep Learning: Classification, regression, clustering, ensemble models (XGBoost/LightGBM), uplift modeling, multi-task learning, RNN/LSTM/GRU for time-series forecasting
Model Validation & Monitoring: OOT testing, drift detection, PSI/GSI, SHAP explainability, fairness/stability checks
Deployment & Automation: Streamlit app development, Git/GitHub Actions (CI/CD), experiment tracking (MLflow)

PROFESSIONAL EXPERIENCE

Associate Director | AI Governance | Data Scientist — Aug '25 - Present

Standard Chartered – Modeling and Analytics (SCMAC) — Bengaluru, IN

Cross-Functional Stakeholder Engagement

- Led AI governance for 150+ enterprise ML models, collaborating with Risk, Business, Product, Compliance, and Engineering to ensure regulatory alignment and business relevance
- Acted as a strategic bridge between technical and business teams, translating requirements into clear validation criteria and enabling informed decision-making

Team Leadership & Capability Building

- Managed and mentored a team of 3 analysts/data scientists, driving high-quality model documentation, validation standards, and best-practice adoption
- Strengthened team capability through structured guidance on model diagnostics, risk assessment, and business communication

End-to-End Model Lifecycle Oversight

- Oversaw the full lifecycle from problem framing and solution design to validation, deployment, and periodic review ensuring models met accuracy, fairness, and stability requirements

Model Validation, Monitoring & Risk Controls

- Performed rigorous OOT validation, hypothesis testing, fairness checks, explainability reviews (SHAP/LIME), and stability diagnostics for high-risk models
- Implemented automated model monitoring frameworks and standardized governance workflows, reducing review timelines by 20–30% and enhancing drift detection

Manager | Machine Learning Engineer | Data Scientist — Aug '22 - Aug '25

Standard Chartered – Modeling and Analytics (SCMAC) — Bengaluru, IN

Propensity Modeling & Marketing Strategy

- Led development of cross-sell, upsell, and retention propensity models across loans, credit cards, insurance, investments, and deposits significantly improving targeting precision and campaign ROI by 7%
- Presented model performance insights (AUC, decile lift, PSI/GSI, rank ordering, business KPIs) to senior leadership, enabling adoption across multiple global markets

Propensity Modeling & Marketing Strategy

- Partnered with product teams to build client-centric deposit pricing models, balancing regulatory constraints, customer sensitivity
- Developed a propensity-driven pricing optimization solution that delivered ~10% Net Interest Margin (NIM) uplift across key markets

ML-Driven Decisioning Tools & Ensemble Modeling

- Built a Python/Streamlit optimization engine combining multiple model outputs (NNM outflow and price sensitivity) into a unified ensemble model, enabling more precise campaign design and targeted deposit retention strategies

Innovation, PoCs & Advanced Modeling

- Presented PoCs to senior leadership to enhance existing propensity-based campaign strategies
  Uplift (True Lift) Modeling for Campaign Cost Optimization: Identified persuadable customer segments, enabling targeted marketing and reducing campaign costs through incremental response modeling
  Multi-Task Learning for Deposit Drop Prediction: Developed a framework combining classification and regression to estimate both probability and magnitude of deposit drop, improving prediction stability and interpretability

Data Scientist — Feb '22 - Aug '22

IIT Madras (IC&SR)

- Built ML powered road condition monitoring/anomaly detection algorithm integrated with GIS mapping with low cost devices
- Engineered driver-behavior classification models to improve risk profiling and enhance decision-making for mobility operations

Mathematics Mentor | IIT JEE — Jun '19 - Feb '22

The Schram Academy | Freelancer

- Trained IIT JEE aspirants with a customized, analytics-driven curriculum for 50+ students annually, improving mock scores by 18-20%. Used performance insights to address learning gaps and adapt lesson plans, strengthening outcomes and reducing dependence on third-party resources

EDUCATION

Executive Post Graduate Programme in Data Science — Feb '22 - Feb '23

IIIT Bangalore — Bengaluru, IN

- **Course Modules:**
  - Data Analysis using SQL | Introduction to Python | Introduction to Machine Learning and Linear Regression | Deep learning
  - Time Series Analysis | Telecom Churn Case Study | Lexical Processing | Syntactic Processing
  - Business Problem Assignment | Building Automated Data Pipelines with Oozie/Airflow | Analytics using PySpark

M.S. by Research — Jan '14 - Jan '19

IIT MADRAS — Chennai, IN

- **Thesis**: *Fatigue Damage Simulation Model for Deep Water Marine Risers*
- **Research Focus**: Computational modeling, predictive failure analysis, matheatical modeling
- **Project** : 3 Years
- **Research paper** : A computer-based simulation model for the fatigue damage assessment of deep water marine riser
- **CGPA :** 8.6

B.Tech in Aeronautical Engineering — Jun '05 - Jul '13

The Aeronautical Society of India — Chennai, IN

- **Final Year Project:** Analysis and Simulation of Supersonic Flow over a Double-Diamond Wedge to Study Shock Formation at Different Angles of Attack.
- **Project duration**: 4 months
- **Percentage** : 60%

KEY PROJECTS

Domain: Finance | Tech Stack: Python, LSTM, GitHub, SQL | Dec'24

- **Objective** : To estimate stock price at 5 min granularity using advances deep learning technique
- **Solution:** Developed a CI/CD pipeline to automate the ingestion of model training data using the yFinance API. Leveraged GitHub Actions to schedule cron jobs for automated data updates and created an interactive front-end dashboard using Streamlit for visualization and monitoring.
- **Key Achievement:** Automated data ingestion at 1 min granularity. Autommated model traing using GitHub action with newly arrived data everyweek. Achived LSTM models for eachscripts with prediction error with 8-10% range.