

SUMMARY

Data Scientist with 4.5 years of experience in **machine learning, NLP, and predictive modeling** across large-scale banking and fintech data. Proven track record of **deploying models impacting millions of customers**, improving risk prediction, and driving measurable business impact. Skilled in **deep learning, transformers, LLMs, and cloud-based ML pipelines**.

Technologies: Python, SQL, PySpark, PyTorch, TensorFlow, Sklearn, XGBoost, Transformers, LLMs, NLP, GenAI, AgenticAI

EDUCATION

Indian Institute of Technology (IIT), Kharagpur: B.Tech in Instrumentation Engineering

2017 - 2021

CORPORATE EXPERIENCES

Data Scientist, IDFC First Bank - Mumbai, India

Sep 2024 - Present

- Built **application scorecard ML model** on Account Aggregator data(bank transactions) for Consumer Durable portfolio. Engineered **Transformer embeddings** from sequential transaction data + manual customer level aggregate features fed into **XGBoost**, outperformed Logistic Regression, XGBoost and LSTM, improving AUC by **+6%** over baseline and reducing losses by **₹15Cr annually** across 2M+ loans.
- Built and **A/B tested Trust Score models** (Identity Trust, Banking Trust, Contactability Trust) used across collections, cross-sell and charge-waiver journeys. The Test group showed **22% higher approval rates**(charge-waiver journey) and **15% reduction in biometric friction**(cross-sell portfolio).
- Deployed a text-mining pipeline on customer transaction descriptions to flag potential **loan default risk from customers planning overseas relocation**, enabling early intervention by risk teams.
- Developed a **CatBoost-based scorecard** model to identify **high-propensity** savings account customers for personal loan cross-sell, improving targeting precision and conversion rates.
- Fine-tuned Microsoft's **MinILM-L12-H384 model** on transaction data to **classify customer transaction modes** from bank statement narrations, enabling automated and scalable transaction categorization for downstream application.

Data Scientist, Standard Chartered Bank - Bangalore, India

Jun 2023 - Aug 2024

- Developed **loss forecasting framework** predicting 18-month forward credit losses across China ANT Finance & Taiwan Personal Loans, enabling the bank to improve capital planning with **~₹200Cr portfolio exposure accuracy**.
- Contributed to Stress Testing & UAT of **PD, EAD & LGD** models for Malaysia & Taiwan portfolios.

Analyst, ICICI Bank - Hyderabad, India

Jul 2021 - May 2023

- Analyzed **FASTag customer data (2M+ users)** to identify customer segments; optimised RBI-compliant migration to new SOR system, ensuring **100% compliance with zero downtime**.

ENTREPRENEURIAL INITIATIVES

Founder, Suupam (A Local Social App) - Bangalore, India

Sep 2023 - Mar 2025

- Built & scaled a **local community social networking app** to **2000+ active users** and **₹2L+ ARR**, enabling people to connect with like-minded peers in their locality.
- Application: Flutter, Backend: Firebase

RESEARCH PROJECTS & INTERNSHIPS

Drivers of helpfulness of online hotel reviews Prof. Dr. Swagato Chatterjee VGSOM IIT Kgp

Sep 2018 - Dec 2018

- Conducted sentiment and emotion mining on online hotel reviews using NLP techniques to identify drivers of review helpfulness, work later published in the International Journal of Hospitality Management.

WebEngage Marketing Analyst Intern, Mumbai, India

Apr 2020 - Jun 2020

- Designed a logistic regression model to score startups to be onboarded for WebEngage's Startup Programme.

ACHIEVEMENTS

- Secured **99.5+ percentile** in JEE Advanced & Mains 2017.
- Ranked **169 in WBJEE 2017** and **3rd in Presidency Univ. Entrance (Economics)**.
- Secured **99+ percentile** in CAT 2022.
- Founded multiple D2C consumer tech apps & platforms (Suupam app, Frustrappa.com, PlaceBuddy app).
- Certifications: Base SAS Training – SAS Institute, Certificate Program in Investment Banking - Altuni
- Blog: [aritificialintelligence.com](#)