

## 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 & INTERSHIPS

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