ROOPKISHOR SINGH

Toast | Goldman Sachs | IIT Roorkee   **Contact: roopkishor.iitr@gmail.com | +91-8979094324**

Website: rks-ds.github.io/roopkishorsingh.github.io/

SUMMARY

Results-driven Data Science professional with a strong track record of delivering impactful AI/ML solutions in the fintech space, particularly across Fraud, Lending, and Financial Management. Adept at building and deploying end-to-end machine learning systems that enhance operational efficiency, drive customer satisfaction, and deliver high-impact business outcomes.

EDUCATION AND SCHOLASTIC ACHIEVEMENTS

Program	Institution	%/CGPA	Year
B. Tech (Mechanical Engineering)	Indian Institute of Technology Roorkee	7.7	2018
Class XII (C.B.S.E.)	Central Academy	90.2%	2014
Class X (C.B.S.E.)	Tata Chem DAV Public School	10	2012

AREA OF INTERESTS

Gen AI, RAG, Fraud, Lending, Personal Financial Management, Natural Language Processing, Time Series Forecasting

TECH STACK

Python, AWS, Docker, Spark, Streamlit, Snowflake, Databricks, Tableau

PROFESSIONAL EXPERIENCE

Staff Data Scientist Toast Inc. Bangalore Sept 2022-Present	• **GenAI Powered Chargeback Explanation:** Developed a GenAI-driven solution to provide clear, comprehensive chargeback explanations, enabling businesses to effectively challenge disputes, **reducing challenge time from 21 minutes to 5 minutes per chargeback, boosting operational efficiency.** • **GenAI Powered Transaction Enrichment System for restaurants:** Leveraging AI to categorize bank data to provide merchant and category insights. **Boosted NPS by 10% and increased adoption by 200%, driving customer satisfaction.** • **Long-Term Revenue Forecast:** Built a 360-day revenue forecasting model using LSTM and N-BEATS, providing accurate predictions for loan sizing within **Toast Lending**. Improved forecasting accuracy by **20%**, contributing to a **$30M increase in loan origination** for 2024. • **Fraud Detection Model:** Developed a fraud detection model based on the **isolation forest** algorithm, improving investigation efficiency and reducing manual intervention. Achieved a **37% reduction in false positives**, streamlining fraud detection workflows and improving resource allocation. • **Chargeback Win Probability Model:** Created a classification model that predicts the likelihood of winning chargeback disputes, enhancing customer experience and minimizing financial losses. **Increased win rate by 35% and saved $3M for restaurants from 2024 to 2025.**
	Mentorship - *Mentored a 4-member team across multiple projects in lending and fraud.* **Executive Acknowledgment** - *Received recognition from C-level executives for consistently reaching the finals with top-tier ideas in multiple internal hackathons.*
Data Science Associate Goldman Sachs Bangalore June 2018-Sep 2022	• **Transaction Categorization and Merchant Name Extraction** - Developed a Random Forest model to classify user transactions into 24 categories (e.g., shopping, bills) based on descriptions. **Extracting** clean merchant names from the description using **fastText embeddings** to prioritize rarely occurring words. • **Asset Verification Service** - Built a model and API to estimate user income which can be used by various lines of business, especially lending. **Operational Risk Models and Metrics:** • Developed the **first machine learning model to classify operational risk events** to L4 Risk Taxonomy using NLP and other techniques. This model Reduced manual effort by 80% along with the scope for human errors. • Designed and Developed automated metrics to track key operational risk indicators of the firm.

SCHOLASTIC ACHIEVEMENTS

- Secured **1st position in GS Quantify 2017** hosted by Goldman Sachs for 22 top tier colleges in India
- Secured **2nd position in Young Data Science 2017 competition** by ZS Associates
- Secured **1st position in Data Analytics Competition 2017** conducted by Department of Management Studies, IIT Roorkee

COURSES

- Coursera - Natural Language Processing, AWS Fundamentals, MLOPs

POSITIONS OF RESPONSIBILITY

Secretary **Data Science Group** IIT Roorkee	DSG, IITR is a group of data science enthusiasts who aim towards developing the culture of data science. **Lead a team of 22 people** and Played an instrumental role in the establishment of the group. Conducted workshops, hackathons, and research paper discussions.