

AAYUSH GUPTA

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EXPERIENCE

Data Scientist -3 | Cashfree Payments | Bangalore, India May 2023- Present

Working in the Central Data Science Team

- Implemented a Thompson sampling-based reinforcement learning algorithm to dynamically select between multiple payment gateways for transaction processing, optimizing payment success rates by 0.92%.
- Leveraged Large Language Models (LLMs) to develop an innovative automated care ticket response system, significantly reducing response times and improving customer satisfaction.

Staff Data Scientist | Simpl | Bangalore, India Aug 2022- Apr 2023

Worked in the Underwriting Team

- Led a team of two data scientists in developing and deploying an underwriting machine learning model that improved approval rates by 5% and reduced delinquency by 2%.
- Proactively identified and resolved technical issues related to data collection, preparation, and analysis, ensuring accurate and reliable results. Optimized SQL queries to extract raw data, leading to a 40% decrease in model training time from 10 to 6 hours.
- Managed data infrastructure, including data pipelines and databases, to ensure data quality and accessibility for the underwriting team. Conducted A/B testing to evaluate the new model's performance

Data Scientist | Razorpay | Bangalore, India Nov 2020- Aug 2022

Worked in the Central Data Science team for Payments

- **Smart Routing of Payments:** Transformed the existing rule-based system to a scalable ML system that intelligently handles payment transactions and routes payments through the best terminal. Designed and implemented the end-to-end solution, saving millions of dollars and increasing the success rate by 4-6%. Published the paper at the IEEE Conference for the same

Machine Learning Engineer | Quantiphi Analytics | Mumbai, India Jul 2018- Nov 2020

Worked in the Applied Artificial Intelligence Division of Quantiphi

- **Automated Call Summarization (Natural Language Processing):**
Built the pipeline for automated Call Summarization involving Google's Speech to Text API and Bert-based models to generate extractive and abstractive summaries for Agents and Customers. Improved the overall execution time by 50% by drastically reducing manual efforts.
- **Crew-Assisted Monitoring System & Trespasser Detection System (Computer Vision):**
Built a video analytics solution capable of detecting and classifying objects (flags, signals, tracks, plates, trespassers) from the real-time video feed through the train's front camera. This solution assisted the driver in better decision-making and enabled Advanced Analytics based on geometrical data points.

EDUCATION

International Institute of Information Technology (IIIT Bangalore) | India 2020 -2021

- PG Diploma in Machine Learning and AI

Birla Institute of Technology and Science (BITS Pilani) | India 2013 - 2018

- M.Sc. (Hons.) Mathematics
- B.E. (Hons.) Chemical Engineering

SKILLS

Statistics, Python, Regression, Classification, Feature Engineering, Data Visualization, Ensemble, Neural Networks, Deep Learning, Computer Vision, Natural Language Processing, LLM, Pyspark, SQL, PostgreSQL, Redis, GCP, AWS, Spark, Docker, Kubernetes, Flask, Grafana, Sumologic, Airflow

PUBLICATION

[An AI-powered Smart Routing Solution for Payment Systems](#)

IEEE BigData, 2021

[Pollutant monitoring in the tail gas of sulfur recovery unit with statistical models](#)

Taylor & Francis, 2018