

Strategic and results-driven **Data Scientist** and **Machine Learning Engineer** with **5 years** of industry experience and a **publication(DOI: 10.1109/TCYB.2022.3165879)** in **IEEE Transactions** on Cybernetics **journal**. Proven track record in building scalable **ML** and **GenAI** solutions across **cloud** platforms. Experienced in **leading** distributed teams and aligning with **global stakeholders** across time zones to drive project delivery. Strong background in **model development**, **software development**, **MLOps**, and end-to-end pipeline automation.

SKILLS

Python, SQL, PySpark, PyTorch, Keras, HuggingFace, Transformers, FSDP, LangChain, LangSmith, LangGraph, LlamaIndex, DPO, LoRA, PEFT, OpenAI, Llama, Mistral, Bert, Retrieval-Augmented Generation (RAG), Prompt Engineering, Distributed Training (FSDP, DDP), Model Parallelism, Mixed Precision Training, SageMaker, MWAA, MLflow, CI/CD, GitHub Actions, Pydantic, Docker, SageMaker Pipelines, Model Monitoring, AWS (SageMaker, EC2, S3, MWAA), GCP, A/B Testing, Statistical Modeling, Cross-functional Collaboration, Debugging, Domain Adaptation, Time Series Forecasting, System Design

TECHNICAL EXPERIENCE

Senior Machine Learning Engineer (L3)
Spring Financial

Mar 2025 — Present
Gurugram, India

- Developed end-to-end ML models for **loan approval** prediction, driving data-informed credit decisions.
- Scaled ML infrastructure from local to **AWS** using **S3**, **MLflow**, and **MWAA**; led deployment and workflow automation with **ownership** and initiative.
- Conducted knowledge-sharing sessions on **MLflow** for collaborative model training, **LoRA** for **PEFT** of LLMs, and **Agentic AI** to support team-wide learning and adoption of advanced ML techniques.

Senior Manager / Associate
Bank of America

Jan 2023 — Mar 2025
Gurugram, India

- Developed a **Retrieval Augmented Generation (RAG)**-based POC using **Gen AI**, **LLMs** and **NLP** to process 2000 model documents, automating QA/QC by extracting answers to a fixed set of questions from tables and multi-page PDF contexts.
- Developed a **Python library** that consolidates various **hypothesis tests** for streamlined development and validation of **linear**, **logistic**, **time series** and **AI** models, significantly improving the **efficiency and accuracy of model validation processes** while saving valuable time for other data scientists, model validators and quants.

Data Science Analyst
Accenture Solutions Pvt Ltd

Aug 2021 — Jan 2023
Bengaluru, India

- Developed an innovative AI engine to detect and analyze bias across HR processes, leading to the creation of a pioneering whitepaper, **increased revenue by 10%** for the team and attracted a wave of **new clients**.
- Identified distinct patterns and behaviors of prospects converting to customers through **customer segmentation**. This successful project resulted in a **3-year contract extension with the client**.
- Improved SQL query performance by **20 times**, effectively resolving multiple client escalations.

Data Scientist - Post Graduate Trainee
Secure Meters

Jul 2020 — Aug 2021
Udaipur, India

- Designed an AI based solution** to predict the remaining useful life of water pumps, resulting in cost savings and **prevention of penalties** through improved maintenance planning.
- Established a **robust infrastructure** within the organization, ensuring adherence to best practices in machine learning.

CERTIFICATIONS

Google Associate Cloud Engineer

2023

IEEE JOURNAL PUBLICATION

Intuitionistic Fuzzy Weighted Least Squares Twin SVMs [SCI Indexed with **Impact Factor: 19.12**]

2022

EDUCATION

Master of Science in Mathematics, Indian Institute of Technology, Indore

2020

Bachelor of Science in Mathematics(Hons), University of Calcutta

2018

ACHIEVEMENTS

- Best Research paper award 2023** from IIT Indore for IEEE Transactions Publication with impact factor of 19.12
- Excellence in Research** award from IIT Indore
- Ranked 274** in IIT JAM (Mathematics)
- Winner of **Reliance Trends Trend Utsav** Fashion Show sponsored by **Ebela**