

# ARPIT SHROTRIYA

## Education

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### New Jersey Institute Of Technology

*MS in Computer Science; GPA: 3.72*

Sept 2024 - May 2026

Newark, NJ, USA

- **Coursework:** Deep Learning With Computer Vision, DSA, Reinforcement Learning, Machine Learning, Capstone Project, Data Management System Design, Data Mining, Intro to BigData

## Experience

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### Veeyo Tech

Jul 2023 - Aug 2024

*Associate Data Scientist*

New Delhi, India

- **Designed and deployed** LLM-powered conversational AI systems using Gemini APIs and fine-tuned BERT models, enabling autonomous task handling and resolving 65% of customer support queries without human intervention.
- **Developed and optimized** Retrieval-Augmented Generation (RAG) pipelines integrating vector-based retrieval for grounding LLM responses on structured and unstructured documents, **reducing manual review time by 45%**.
- **Built enterprise-grade** MLOps pipelines using AWS Lambda, S3, and SageMaker for automated ingestion, preprocessing, deployment, monitoring, and **scaling of ML models over 1M+ daily records**.
- Collaborated with product teams to translate business workflows into **AI automation features, cutting payment reconciliation times by 35%**.
- Engineered **scalable data pipelines** using Python, SQL, and AWS Lambda to ingest and process high-volume time-series and transactional datasets, **improving system efficiency by 30%**.

### Sail Analytics

Jun 2022 - Jun 2023

*Data Engineer*

New Delhi, India

- Automated report generation pipelines using Python and HTML to email Excel files, **reducing manual work by 30%**.
- Applied OCR via Python to extract key data from over **1,000 receipts with 95% accuracy**, significantly speeding up client insights.
- Developed ETL workflows to consolidate large-scale structured datasets into analytical dashboards, supporting downstream ML modeling and business insights.
- Enabled secure SAP HANA to BigQuery data transfers, **reducing data movement time by 20%**.

### Roboiotics Services

Feb 2022 - May 2022

*Data Analyst*

New Delhi, India

- Designed and implemented 8+ custom PyQt5-based GUIs, **reducing average data-entry time by 30% and cutting training ramp-up for new users from 5 days to 3 days**.
- Architected secure authentication schemas and RESTful APIs supporting 5,000+ daily sessions with 99.8% uptime, emphasizing reliability and fault tolerance.
- Collaborated with UX, backend, and QA teams in 12+ cross-functional sprints to **deliver features 20% faster than projected timelines**.

## Technical Skills

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- Core: Python, SQL, PyTorch, TensorFlow, Scikit-learn, Transformers, HuggingFace, Pandas, NumPy
- AI/ML: Large Language Models (LLMs), Agentic AI Systems, Retrieval-Augmented Generation (RAG), Prompt Engineering, NLP, OCR, Model Optimization Fine-Tuning
- Tools: AWS (Lambda, S3, SageMaker), GCP (BigQuery), MLOps, Model Monitoring Observability, CI/CD for AI Pipelines
- Cloud/Data: AWS, GCP, ETL Pipelines, SAP HANA, Data Engineering
- Tools & Platforms: Windsurf, Git, Postman, MySQL, MongoDB, Datadog.

## Project

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- **Search Engine with LLM :** • Architected an agentic LLM-based research assistant using LangChain and Streamlit, implementing RAG workflows for grounded multi-source knowledge retrieval.
- **MathSolveX :** Constructed and deployed an interactive churn prediction tool using TensorFlow and Streamlit, empowering business users to forecast churn risk with 95% accuracy based on user input.
- **Rusty-Playground :** A step-by-step adventure through Rust programming with practical mini-projects. Follow along as I build small applications from simple calculators to more complex systems, documenting my learning process and code improvements.