

Arijit Kumar Roy

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PROFILE SUMMARY

I am a *product-minded* engineer with 7 years of experience in Data and AI Engineering, Linux, Distributed Systems, Cloud (AWS/Azure) and SaaS products. Currently working in a Data Platform Engineering role with previous experience in Data Engineering and Full Stack Development (MEAN/MERN). I have worked with technologies in Conversational AI, Applied Generative AI, LangChain Stack, Embeddings, Python, Golang, Spark, Databricks, Snowflake, dbt, Rest APIs, DeltaLake, and Databases regularly looking over the CI/CD and production deployment and deliverables in my team.

EXPERIENCE

RED HAT | SENIOR SOFTWARE ENGINEER | DATA & AI, PLATFORM ENGINEERING

Apr 2024 – Present | Bengaluru, India

- Building a self-service gitops-based declarative *data mesh* based Data Platform (*Snowflake, dbt, Fivetran, Astronomer / Airflow, Kubernetes*), reducing data silos, increasing transparency and data accessibility, **reducing cost by \$100k+ annually** and time to market replacing legacy *Redshift/Starburst* systems
- Implemented Release Automation and CI Enablement Tools reducing **1000+ hours of senior developer manual work annually**; enabled **100+ data products** with *ASCA* and *PIA* compliance, providing them with **Cost and Usage monitoring**
- Championed end-to-end data discovery and data governance, leveraging *Atlan*, shipped to production, scaled growth & adoption, completed the **0-1-10 journey**, gained trust of senior leadership and stakeholders.
- Building Metadata Completeness, Guidance for AI Agents, *MCP* servers, AI observability & tools
- *Tech: Git Ops, Snowflake, dbt-Core, AWS, Golang, Kubernetes, Python, Fivetran, Astronomer/Airflow, Atlan, Gitlab CI/CD*

BEEM | SENIOR DATA ENGINEER | FINANCIAL SERVICES

Nov 2023 – Mar 2024 | Remote, US

- AI First Fintech Startup for US working class consumers
- Developing Data & AI Platform (**50M+ users**) for Personal Finance Management tools using *LLMs* with Data Governance and Orchestration
- Investor pitches & completed fundraising from *Databricks* of \$16k, with future commitments of \$24k
- Created workflows to analyse *clickstream* data of users (*AWS, Python, Databricks, Mixpanel, Metabase*)

TATA DIGITAL | SENIOR SOFTWARE ENGINEER | E-COMMERCE, RETAIL

Aug 2021 – Oct 2023 | Strategic Initiatives | Bengaluru, India

- *Conversational AI* | Big Data | Data Warehousing (**120M+ users**)
- Working on Generative AI based Product Search Platform and Recommendation Engine using *Azure Open AI, Mistral, LangChain, Embeddings, Vector Databases (Chroma / Milvus)*
- Migrated from Legacy to *Delta Lake* Architecture and optimized Total Cost of Ownership & Efficiency (*Python, Spark, Databricks, Delta, ADLS, CI/CD in Azure DevOps, KQL/SQL*)
 - Implemented Load balancing to **reduce operation TTL by 10 times**
 - Reduced **operation latency by 75%, cost by 80%**
- Customer Support Call Evaluation using Deep learning, Speech-to-Text, Audio ML techniques
- Created micro-services for API monitoring for multiple brands integrations & downtime alerts for the **AI chatbot** program, for **12 indic languages**
- **Live Dashboards** for 24x7 for real-time monitoring & alerting

GNOSIS LAB | FOUNDING ENGINEER | NASSCOM 10K STARTUPS

June 2019 - May 2021 | Kolkata, India

- Built an AI bot for a SaaS Platform to automate social media marketing on Instagram, Twitter using *Serverless, Python, AWS, Web Scraping, Data Modeling*
- MEAN Stack Developer (*Typescript, Angular, AWS, Lambda, DynamoDB, MongoDB, Docker*)
- Worked on Learning Management System Platform, **backend heavy** (50+ APIs)

PROJECTS

DOCTOR – CLINICAL MANAGEMENT

SOFTWARE | FREELANCE PROJECT

2021 | React Native, GCP, Firebase, BigQuery, Razorpay

- Delivered production ready android app and website for appointment bookings and doctor practice management using **React Native** and **Firebase** as a backend.
- Integrating **Razorpay** for payment services for customers to securely transact.

OFFLINE FILE SYSTEM SEARCH | RESEARCH

PROJECT | SUMMER SCHOOL

March 2017 | Python, Linux Bash tools, NLP

- Document Indexer for Information Retrieval under supervision of Dr. Dwaipayan Roy, Information Retrieval Lab, Indian Statistical Institute, Kolkata

EDUCATION

JADAVPUR UNIVERSITY

MASTERS IN COMPUTER APPLICATIONS

Aug 2018 - Jun 2021 | Kolkata, IN

Distributed Systems / Cloud Computing

Cum. GPA: 8.81 / 10.0

RAMAKRISHNA MISSION VIDYAMANDIRA

BS IN COMPUTER SCIENCE

Aug 2015 - May 2018 | Howrah, IN

Cum. GPA: 8.49 / 10.0

SOUTH POINT HIGH SCHOOL

HIGH SCHOOL

Grad. 2015 | Kolkata, India

Grade: A+

SKILLS

PROGRAMMING

Core Technologies:

Python • Databricks • Snowflake

DeltaLake • Pyspark • AWS

Git Ops • Kubernetes • LangChain

OpenAI / Claude / Mistral • LLMs • Javascript

Additional:

Typescript • Git • Azure

SQL/NoSQL • NodeJS • APIs

MVC • Serverless • Docker

Azure DevOps • React Native

Dbt • Golang • Ansible

Engineering Data Management • Governance

SSO/OAuth systems • Cursor • Claude Code

SPECIALIZATION

Distributed Systems • Information Retrieval

Electronics • Cloud Computing

Data Structures Algorithms

Operating Systems

Object Oriented Programming

ML/AI • NLP

LANGUAGES

English • Bengali • Hindi

HOBBIES

Chess • Table Tennis

Tech blogging • Linux Ricing

LINKS

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