Arijit Kumar Roy

arijitroyoo3@gmail.com | +917980045423 | Bangalore, India | Github | LinkedIn | Website

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 lead engineer 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 <u>Atlan</u>, shipped to production, scaled growth & adoption, completed the **0-1-10 journey**, gained trust of senior leadership and stakeholders.
- Building Metadata Completeness, Guidance for Al Agents, MCP servers, Al 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

- Al First Fintech Startup for US working class consumers
- Developing Data & Al 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 <u>Delta Lake Architecture</u> 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 <u>Dr. Dwaipayan Roy</u>, 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

SPECIAL IZATION

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

Github://arijitroy003 LinkedIn://Arijit Roy