AAYUSH OSTWAL

Senior Al Engineer

♣ Website | • Github | ■ Blogs | ☐ LinkedIn

J 7821921927

SUMMARY

Experienced Al Engineer with 4+ years of proven expertise in architecting and delivering scalable, intuitive products across diverse tech stacks. Adept at navigating complex systems, driving cross-functional collaboration, and mentoring teams to consistently exceed performance benchmarks. Known for transforming ambiguous problems into elegant, high-impact solutions that balance usability with technical depth. Relentlessly focused on engineering excellence, system design, and delivering measurable business value.

EXPERIENCE

Senior Al Engineer June'22-Present

Qure.ai

- Modularized X-ray & CT processing into microservices, reducing Bazel dependencies to accelerate builds and releases by 40%.
- Engineered real-time, operational-level database sync with complex Foreign Key Resolution Algorithm from 100+ on-prem systems to cloud.
- Optimized database performance maintaining CPU under 50% by leveraging EXPLAIN plans, minimizing MultiXact and buffer waits, and implementing dynamic partitioning, saving \$20K in infra costs
- Built an in-house translation service using Django and Vite.js, deployed on Vercel, saving \$10K+ annually in localization costs with **Zero** Downtime.
- Customized open-source Metabase in Clojure with i18n configs and APIs to enable internationalization across 8+ languages.
- Developed an FSM-based interface enabling interactive user workflows with configurable, event-driven transitions and automated actions.
- Coded Infrastrucure as Code (IaC) using aws-cdk which reduced deployment time by 50% across 8 regions and 5 microservices.
- Led a team of 4, mentored junior developers, and designed and streamlined the interview process for SRE and SDE roles to improve hiring efficiency.
- Created small LLM Agents with RAG to search with internal code and Documentation using vector database and AWS Bedrock.

Data Scientist June'21-June'22

HiLabs Inc

- > Built an internal provider directory by web-scraping U.S. doctor data from 20+ insurer sites using Selenium, Python, and Tor for seamless IP rotation.
- Accelerated processing of 1M+ records from 2 days to 3 hours using PySpark on Hadoop clusters.
- Improved data quality by identifying and removing 89K+ anomalous addresses in the Georgia market, enhancing final client report accuracy.
- Led 20+ sales POCs, securing 5 wins and 1 full-scale contract for enterprise-level data validation.

Data Scientist, Internship Feb'21-May'21

HiLabs Inc

Rewritten, optimized, & organized 500+ complex SQL queries to generate reliable datasets & dashboards for business intelligence & reporting.

Data Analyst, Internship Mav'20-June'20

MateRate Education

- Constructed Agglomerative Clustering models to segment student groups for Randomized Control Trials, enabling targeted interventions.
- Automated stakeholder reporting by generating interactive **HTML** reports from student responses using Python, improving transparency & efficiency.

EDUCATION

Bachelors of Technology in Mechanical Engineering

June'17 - June'21

Indian Institute of Technology, Kanpur

7.9 CPI

Courses: Probability, Statistics, Data Structure and Algorithms, Time Series Analysis, Advanced Statistical methods for Business Analytics

PROJECTS

Portfolio Website Github

- Designed and developed a personal website using TypeScript and deployed on Vercel for high performance and scalability
- Integrated Medium articles into personal website with topic-based tagging and implemented a filtering feature for easy content navigation

Author Medium

> Authored 35+ technical articles for publications like Towards Data Science, LevelUpCoding, & Illumination on software development, databases, & Al

SKILLS

Languages Python, Javascript, Bash, SQL, Groovy, C++, Clojure, Scala, PySpark

* Frameworks Django, Celery, Bazel, Hadoop, React, Vite.JS, TypeScript, Torchserve, LangChain

■ Databases PostgreSQL, MySQL, Redis, H2, Chroma, SpaceTimeDB

Cloud Infrastructure AWS: EC2, RDS, Lambda, Cloudwatch, Cloudfront, SQS, SNS, Cache, ASG, ELB, CDK, Redbrick, VPC Peering

x Tools Jenkins, Dockers, Metabase, Grafana, Datadog, Keycloak (OAuth2), Git, Vercel, git-SPR, Firebase, Figma, JIRA

EXTRACURRICULARS

Coordinator 2019-20

Dramatics Club, IIT Kanpur

- Organized 5+ Theater Activities and Competitions on the campus with a dedicated Team of 50+ members.
- Collaborated with Election Commission Cell for smooth conduction of events and Cell for Differently Abled for awareness and motivation.
- Secured 1st position in Street Play, 2nd position in Stage play and Mime in Antaragni'19, and 1st position in Street Play in Inter IIT Cult Meet 4.0.