AABESH KARMACHARYA

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PROFESSIONAL SUMMARY

Full-stack developer with over 9 years of experience specializing in backend systems, data engineering, and Al-integrated applications. Skilled in designing scalable architectures, developing data pipelines, and implementing Al-driven solutions. Adept at leveraging cloud infrastructure and modern frameworks to build robust, high-performance software for data-centric environments.

PROFESSIONAL EXPERIENCE

Onaroll Inc. — Full-Stack Developer
June 2021 – September 2025 | Remote

- Led multiple feature development projects from concept to deployment, improving reliability, scalability, and system efficiency across the platform.
- Designed and built data pipelines using Dagster to fetch, clean, and process customer data from multiple sources — generating analytics and performance metrics for reward systems.
- Architected and implemented complex microservice systems using Redis
 (caching), AWS SQS and Google Pub/Sub (queuing), Django-Q (asynchronous
 tasks), and Dagster (scheduling and orchestration).
- Designed databases for both **BigQuery** (data warehousing) and **PostgreSQL** (transactional data) to support scalable and query-efficient systems.
- Developed and deployed an Al-powered chatbot that allowed users to query employee performance and metrics via natural language — using prompt engineering and integration with LLMs (Large Language Models) for contextual, data-backed responses.
- Introduced **Al-assisted workflows** to streamline code generation, debugging, and documentation, improving development speed and reducing repetitive tasks.
- Reduced technical debt by implementing static typing in Python, creating coding standards, and documenting API and service development guidelines.
- Built integration solutions for third-party APIs and internal systems, ensuring data integrity and system reliability.
- Implemented a **user history and progress tracking feature**, enabling users to view historical performance data through an intuitive interface.
- Collaborated with cross-functional teams to gather requirements, define architecture, and deliver high-quality features within deadlines.

Freelance Developer — Upwork & Independent Projects 2016 – 2021 | Remote (Global Clients)

- Delivered full-stack projects for startups and businesses across the US, Europe, and Asia.
- Built scalable data-mining tools to extract and process millions of records from thousands of websites.
- Developed admin dashboards and APIs to visualize, transform, and serve large datasets.
- Created data-driven tools that generated summaries, reports, and insights for client decision-making.
- Designed flexible API architectures to provide data in multiple formats as per client needs.
- Collaborated directly with clients to define requirements and deliver custom technical solutions.

EDUCATION

Tribhuvan University

Bachelor of Science in Computer Science and Information Technology 2012 – 2016

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Kotlin, Java

Frameworks: Django, FastAPI, React

Libraries & Tools: Dagster, Polars, Pandas, LangChain, OpenAl API, Hugging Face

Transformers

Databases: PostgreSQL, MySQL, Redis, MongoDB, Neo4J

Cloud & DevOps: AWS, GCP, Docker, Heroku

Version Control & Collaboration: Git, Jira, Postman, Swagger

Al & Data Engineering: LLM integration, Prompt Engineering, Data Pipelines, Model

Deployment, API-based AI Workflows

KEY STRENGTHS

- Strong understanding of data-driven systems and Al-assisted development
- Experience in designing microservice architectures and distributed systems
- Focus on code quality, maintainability, and scalability
- Excellent communicator and proactive problem solver in remote, cross-functional teams