Ayush Anand

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EDUCATION

National Institute of Technology

Durgapur, India

Bachelor of Technology in Computer Science and Engineering — GPA: 9.46/10

2025

- Courses: Data Structure and Algorithms, Operating Systems, Database Management System, Computer Networks
- Organisations: Vice Chairperson @ Indian Society for Technical Education (ISTE) Students' Chapter

EXPERIENCE

Software Engineer

Gurugram, India Dec 2024 - Present

Zomato Limited

- Increased completion of critical sales tasks by 35% by shipping a real-time push notification platform (Go + Kafka); designed idempotent consumers, retry/backoff, and rules-based routing so the right teams acted on the right events fast.
- Cut invoice processing cost 10x and cycle time 50% by building an automated extraction & attribution pipeline on in-house LLM services; unified ingestion → parsing → validation → posting → approval, with confidence thresholds, fallbacks, and finance audit logs
- Built a ledger accrual and vendor payout system with SFTP based Bank integrations, (using Go, Kafka, DynamoDB, Redis) to automate disbursements for 10K+ vendors daily which led to saving of nearly 20 hours of man-power every week and reduced errors in payouts.
- Improved reliability and security across a microservices stack by optimizing high-latency APIs (profiling + hot-path rewrites) and remediating critical vulns; introduced safer defaults (authn/z, secret handling) and CI checks (linting, SAST/DAST) to harden production.

Software Engineer Intern

Mumbai, India

JP Morgan Chase & Co

May 2024 - July 2024

- Achieved a 70% reduction in time-to-recovery from failed Risk and PnL jobs by developing a Flask-based API utility with thread pooling, local caching, and RQL for JP Morgan's in-house trading platform.
- Improved system performance and data retrieval by utilizing an in-house distributed object store with indexing, resulting in a 100% increase in meeting End-of-Day SLAs.
- Enhanced overall system efficiency and reliability by implementing load balancing and optimized data processing frameworks to deliver high-impact business solutions.

Software Engineer

Remote, UK

DB News

Nov 2023 - May 2024

- Successfully led a 20% increase in user subscriptions by developing a high-performance news streaming platform, ensuring real-time updates with less than 300ms latency through the utilization of Websocket as a Service and Pub/Sub architecture.
- Enhanced Postgres database operations to achieve a remarkable 3ms latency for reads/writes through indexing and partitioning techniques, optimizing overall system responsiveness.
- Created robust user session management using Redis, enabling seamless authentication and authorization processes while managing over 3,000 daily write operations and 15,000 daily read operations on the database.

Software Engineer Intern

Remote

Google Summer of Code

May 2022 - Sept 2022

- Developed and optimized a Python package to improve performance and scalability for marine researchers, reducing data processing time by over 70%. *qithub.com/iobis/pyobis*.
- Refactored codebase to reduce size by over 50%, improving efficiency and enabling widespread use by researchers at the University of South Florida.
- Implemented 5+ new features, resolved 27+ open issues, and improved performance by over 75% within 4 weeks.

SKILLS

Programming Languages

Golang, Python, C++, C, TypeScript, JavaScript

Libraries/Tools

MySQL, gRPC, Redis, Git, React, Node.js, CI/CD, FastAPI

Technologies AWS, Docker, Kuma distributed mesh, Postgres, Apache Kafka, Linux, REST API

PROJECTS

as-http3lib - An Asynchronous HTTP/3 (HTTP over QUIC) Server Library

Technologies used: Golang, QUIC, BoringSSL, IP, Networks, Linux

- 1. Developed an asynchronous HTTP/3 (HTTP over QUIC) library for server creation, integrating event loops (libev) and native Linux primitives, while leveraging Cloudflare's quiche implementation.
- 2. Achieved nearly 153x faster startup times and improved p95 RTT by 50.97% compared to FastAPI. GitHub

MagicChat - AI Powered Kids Entertainment Platform.

Technologies used: Next.js, FastAPI, Firebase, GPT-3.5, Eleven Labs

- 1. Developed and implemented 10+ virtual characters on a GPT powered kids entertainment platform to enhance user interactions, resulting in a 25% increase in user engagement and a 15% rise in conversion rates.
- 2. Enhanced platform performance with Next.js SSR and FastAPI, achieving a 25% reduction in latency and increased user satisfaction through HTTP EventStreams, while successfully stress testing with 1000+ concurrent users. GitHub

ACHIEVEMENTS

- Knight on LeetCode Rating: 1872 Top 5.22%
- Secured first rank among 850+ students with a 9.9/10 SGPA, demonstrating academic excellence.
- Secured 99.30 percentile in the IIT-JEE Mains Exam and achieved All India Rank 6 in CBSE 12 Boards.
- Open Source Contributor to JPMorgan/Salt DS and Todoist/Typist, maintainer of two research python packages.