Aditya Kumar

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Summary

Final year Computer Science Engineering student specializing in Core Java, Object-Oriented Design, Data Structures & Algorithms, and distributed systems. Experienced in building containerized microservices, REST-based platforms, CI/CD pipelines, and algorithmic Java applications. Strong foundation in concurrent programming, Linux, Git, and scalable system design.

Education

Chandigarh University *Aug 2022 – July 2026*

Bachelor of Engineering in Computer Science and Engineering

- GPA: 7.80/10.0
- **Coursework:** Data Structures & Algorithms (Java), Object-Oriented Analysis & Design, Operating Systems (Concurrency), Software Engineering, Distributed Systems, Computer Organization and Architecture, Cloud Computing, Edge and IoT Systems, Machine Learning, Software Engineering, Cybersecurity Fundamentals

Projects

Multi-Container Application Deployment *github.com/kodi73/MultiDocker*

- Developed a Dockerized multi-container web application with PostgreSQL database integration to calculate Fibonacci numbers, implementing CI/CD pipelines for automated deployment and testing.
- Applied scalable architecture and networking concepts using Docker, Nginx, Redis, and Git/GitHub Actions and deployed to Elastic Beanstalk (AWS).

Local Retrieval Augmented Generation System *github.com/kodi73/Local-RAG-System*

- Built a local Retrieval Augmented Generation (RAG) system using large language models to answer questions from local documents, integrating vector databases and embeddings for semantic search.
- Leveraged LangChain, ChromaDB, HuggingFace, and API integrations to design a scalable, efficient, and modular question-answering tool, demonstrating applied knowledge in AI/ML and cloud concepts.

WordNet Semantic Distance Analyzer *github.com/kodi73/WordNet*

- Developed a Core Java application implementing graphs, BFS, DAG validation, and shortest ancestral path algorithms.
- Applied Object-Oriented Design principles, modular architecture, and reusable components.

Hard Skills

Programming Languages: Java (Proficient), C++ (Familiar), Python (Intermediate), C (Familiar), SQL (Proficient), Bash/Shell (Intermediate), JavaScript (Intermediate), HTML (Intermediate), CSS (Intermediate)

Technologies: Microsoft SQL Server, Docker, Git, CI/CD pipelining, Unix/Linux, Microsoft Azure, Kubernetes, REST

Soft Skills

Analytical Thinking, Problem Solving, Teamwork, Communication, Fast Learner, Adaptability, Agile Collaboration, Ownership