

Prathamesh Chikkali

7972080461 — [LinkedIn](#) — chikkaliprathamesh3@gmail.com — [Github](#)

SUMMARY

Analytical B.Tech Computer Science student focused on Backend Engineering and Distributed Systems. Proficient in Java, Python, and C++ with strong foundations in Data Structures, Algorithms, and Operating Systems. Experienced in building scalable APIs and high-concurrency services. Level 4 CodeChef programmer with a track record of solving complex algorithmic challenges and winning national-level hackathons.

TECHNICAL SKILLS

Languages: Java (5-Star HackerRank), Python (NPTEL Certified), C++, SQL, JavaScript (ES6+)

Backend & Cloud: Spring Boot, FastAPI, Node.js (Express), REST APIs, JWT Authentication

Databases & Caching: PostgreSQL, MySQL, Redis, MongoDB

Core CS: DSA (Graphs, DP, Trees/Heaps), OS (Multithreading, Synchronization, Memory Mgmt), DBMS (ACID, Indexing, Normalization)

Tools: Git, Docker, Postman, Linux Shell, Kafka

BACKEND & SYSTEMS PROJECTS

LogStream — Distributed Logging & Messaging Service

Java, Spring Boot, Apache Kafka, Redis, PostgreSQL

- Engineered a distributed logging system ingesting 5,000+ logs/sec using Kafka for producer-consumer decoupling.
- Implemented Write-Back Caching via Redis, reducing database I/O by 70% and achieving sub-50ms latency.
- Ensured data integrity using Optimistic Locking in PostgreSQL during high-volume log aggregation.

Vanguard — Secure API Gateway & Rate Limiter

Python, FastAPI, Redis, Docker, JWT

- Developed a centralized API Gateway implementing Token Bucket rate limiting to mitigate DDoS attacks.
- Leveraged async/await for handling 2,000+ concurrent connections without blocking.
- Integrated JWT authentication and middleware for secure request routing.

FileSystem-Sim — Multithreaded Storage Engine

C++, Pthreads, Linux System Calls

- Built a simulated file system managing metadata and blocks with LRU caching for optimized retrieval.
- Solved Readers-Writers concurrency problem using Mutexes and Condition Variables for thread safety.

ACHIEVEMENTS & CERTIFICATIONS

- CodeChef Level 4 (Highest Rating: 1676), 5-Star in Java and Python on HackerRank.
- NPTEL Data Structures and Algorithms in Python (Nov 2024).
- 1st Place – Samarthana Hackathon.
- Full-Stack Development in Python – EduSkills (Jun 2024).

EDUCATION

Shri Ramdeobaba College of Engineering and Management, Nagpur

B.Tech. in Computer Science (AI & ML)

2023 – 2027

CGPA: 8.65

Sanjay Ghodawat International College, Kolhapur

12th Board (HSC)

2023

76%