

SUVARNA SANAPATHI

Bangalore, India

+91 8125687719 ✉ suvarnasanapathi2001@gmail.com [linkedin.com/in/suvarna-sanapathi-a08097190](https://www.linkedin.com/in/suvarna-sanapathi-a08097190) github.com/suvvvv

Summary

Software Development Engineer with expertise in backend and full-stack development using Java, Spring Boot, React.js, and modern cloud infrastructure. Skilled in designing scalable microservices, streamlining data pipelines, and building high-performance systems on Kubernetes, Kafka, and Elasticsearch. Proven record improving system efficiency by 40%+, delivering API latency reductions, and enabling automation across learning platforms.

Core Skills

- **Programming:** Java, C++, TypeScript, JavaScript, SQL
- **Databases:** MongoDB, PostgreSQL, SQL
- **Cloud:** AWS, Google Cloud Platform (GCP)
- **Frameworks:** Spring Boot, Spring MVC, React.js
- **Tools:** Docker, Kubernetes, Kafka, Redis, Git
- **Other:** Elasticsearch, System Design (LLD/HLD), OOP, TDD, Algorithms, Data Structures

Experience

Vedantu

Nov 2022 – Present

Software Engineer (Full-Stack / Backend)

Bengaluru, India

- Designed and scaled backend services in Java (Spring Boot, MVC) handling multi-threaded data flows for 50k+ learners.
- Deployed a PDF-to-Image microservice on Kubernetes with Docker, GCS, and CDN; improved document delivery speed by 60%.
- Automated student session scheduling via Kafka + Google Calendar API; cut manual errors by 30% and saved 10+ hours/week.
- Accelerated APIs by 40% through MongoDB query optimization, advanced indexing, and Redis-based caching strategies.

Projects

PDF-to-Image Conversion Service

- Architected Kubernetes-based microservice delivering optimized images; reduced load times across platforms by 45%.
- Integrated Docker, GCS, and CDN to guarantee high availability and scalability across thousands of daily users.
- Enabled consistent cross-device compatibility, improving user experience and reducing support tickets by 15%.

Attendance & Scheduling Automation

- Built Kafka + Google Calendar pipeline to automate student session scheduling with near real-time accuracy.
- Reduced manual scheduling by 80% and eliminated recurring conflicts, enhancing tutor efficiency significantly.
- Scaled system to handle concurrent calendar updates for hundreds of simultaneous classes.

Elasticsearch Search System

- Developed and tuned Elasticsearch pipelines, improving search latency by 35% across millions of indexed records.
- Enhanced recommendation accuracy through fine-tuned query relevance models; boosted student engagement by 20%.
- Implemented real-time updates to support high-volume content discovery with minimal downtime.

Education

Rajiv Gandhi University of Knowledge Technologies, Nuzvid

May 2023

Bachelor of Technology in Computer Science — CGPA: 9.2

India