

Ekant Kapgate

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EDUCATION

San Jose State University, San Jose, CA

Aug. 2025 – May 2027

Master of Science in Computer Software Engineering

Relevant Courses -Enterprise Cloud Technologies, Software System Engineering, Distributed Systems.

Shri Guru Gobind Singhji Inst of Eng and Tech, Nanded, CGPA - 8.66

Aug. 2016 – Sept 2020

Bachelors of Technology in Computer Science

Relevant Courses -Data Structures, Design and Analysis of Algorithms, Operating Systems, Database Management Systems.

PROFESSIONAL EXPERIENCE

Optym, Bengaluru India

Jan 2024 – Aug 2025

Senior Software Engineer

Python, LLMs, Prompt Engineering, Azure, MongoDB

- Built an **agentic chatbot** using **Python**, **FastAPI**, **MongoDB**, and **Azure OpenAI** to accelerate production incident troubleshooting across **100K+** tickets.
- Integrated **vector search** and **prompt engineering** to intelligently query **50K+** **Confluence documents** with **context management**, achieving **20% reduction** in incident resolution time.
- Developed optimization service with **Spring Boot** implementing Neural Large Neighborhood Search with mixed-integer programming to deliver **23% improvement** over baseline methods.
- Led enterprise application modernization through **Spring Boot** upgrade with **Clean Architecture**, **IoC containers**, and **Repository patterns** to deliver **30%** performance gains and **40%** cyclomatic complexity reduction.

Optym, Bengaluru India

Mar 2021 – Jan 2024

Software Engineer

Spring Boot, Redis, SQL, Docker, Kubernetes

- Architected microservices data layer using **gRPC** and **CQRS patterns** to enhance system performance by **30%** with **horizontal scalability**.
- Designed in-memory caching framework with **Redis** and **Spring Boot** to reduce page load times by **60%**.
- Engineered a KPI benchmarking workflow leveraging **SQL** and **Python** to run 5,000+ scenarios, saving **6 hours/week** and increasing release confidence.
- Delivered production-ready code using **test-driven development (TDD)** principles and collaborated with cross-functional teams to meet project goals.
- Deployed backend services using **Azure Kubernetes Service (AKS)** and **CI/CD** to enhance release efficiency and reliability.

Kratin LLC, India

Dec 2019 – June 2020

Software Development Intern

Spring Boot, Kafka, React, JS, SQL

- Built a real-time notification system with **Kafka** that automated oncology treatment alerts, to reduce care coordination time by **1 hour** per patient.
- Developed **HIPAA-compliant** backend services with **Spring Boot** and **Java**, enabling secure workflows across **4M+** patient records with **99.9% uptime**.
- Created responsive medication management **UI** using **React** to cut manual billing by **70%** and enable **same-day settlements**.

PROJECTS

Notifyme.info

Spring Boot, React, Amazon RDS, AWS

- Developed scalable 3-tier **COVID-19 vaccine slot notifier** web application using React.js frontend and Spring Boot backend during critical pandemic vaccination rollout.
- Built real-time notification system that successfully alerted **20K+** users about vaccine slot availability within seconds of detection, integrating with government APIs to monitor slot updates every **15 minutes**.
- Deployed on **AWS** infrastructure using **EC2**, **load balancing**, and **RDS** to achieve **99.5% uptime** during peak traffic.

PaxBalancer

Sockets, Multi Threading, HTTP Proxying, Vibe Coding

- Built lightweight load balancer using multi-threading and round-robin algorithm to distribute traffic evenly across backend servers.
- Implemented health monitoring and failover using active health checks to automatically remove/restore unhealthy servers.

PUBLICATIONS

Online Product Recommendation Engine — *IEEE GUCON 2020*

- A.V. Harshvardhan, A. Singh, **E.K. Kapgate**, N. Ahuja — ieeexplore.ieee.org/document/9231069

Technical Skills

Programming Languages: Java, C#, Python, SQL (Postgres), C/C++, JavaScript, HTML/CSS

Frameworks: Spring, Spring Boot, .Net, React, Flask, FastAPI, MCP

Databases: PostgreSQL, MySQL, MongoDB, Redis, Firebase

Networking: RESTful API, gRPC, TCP , UDP , HTTP , WebSocket, Server-Sent Events, FCM, GraphQL

Cloud Technologies, Cloud Native and DevOps: Azure Cloud, AWS Cloud, Git, Jenkins, CircleCI, Docker, Kubernetes