

## EDUCATION

National Institute of Technology, Andhra Pradesh  
BTech in Computer Science and Engineering

Aug 2019 – May 2023  
CGPA: 6.75

## SKILLS

**Languages:** C++, C, Python, SQL  
**Databases:** PostgreSQL, MongoDB, Redis, MinIO  
**Web Frameworks:** FastAPI, Django, Flask, DRF  
**Data Processing:** Pandas, NumPy, Seaborn, Matplotlib

**DevOps:** Docker, Docker Compose, Kubernetes, Nginx  
**Cloud:** AWS EC2, S3, DynamoDB, SQS, CloudWatch  
**Event-Driven:** Kafka, RabbitMQ, ZeroMQ, Celery, Dramatiq  
**Concepts:** DSA, OOPS, Microservices, REST, HTTP, SOAP

## EXPERIENCE

### TATA ELXSI LTD

#### Software Engineer

May 2023 – Present

Bengaluru, Karnataka

- Architected scalable backend systems using **Django and FastAPI** with microservices architecture, enhancing database operations across **PostgreSQL, MongoDB, and Redis** for mission-critical industrial applications.
- Directed full-stack development of industrial automation platforms, integrating **5+ AI/ML modules** and managing complex workflows supporting 20+ concurrent processes across frontend, backend, and intelligent processing systems.
- Enhanced database performance using strategic **Redis** caching and query refinement, reducing **MongoDB** access by 80% and improving query speeds by 50%.
- Constructed and deployed **50+ custom REST APIs** for enterprise clients, reducing average API response time from 500ms to 300ms, leading to improved client satisfaction and retention.
- Implemented a **Kafka-based event-driven architecture**, reducing system latency by 60% and enabling real-time data processing and monitoring for industrial applications.
- Adopted **MinIO object storage**, reducing database size by 60% and optimizing access for 500+ GB of enterprise data using pre-signed URLs.
- Engineered **AuditLog CloudWatch factory** processing 5,000+ daily audit events, automatically capturing application logs and streaming to **AWS CloudWatch** for centralized monitoring and compliance reporting.
- Rolled out **3+ full-stack applications** using **Docker and Kubernetes**, handling end-to-end containerization and deployment processes.
- Collaborated with cross-functional engineering and QA teams, implementing **SDLC practices** including code reviews, automated testing, and documentation standards.

### TATA ELXSI LTD

#### Software Engineer Intern

Jan 2023 – May 2023

Bengaluru, Karnataka

- Developed asynchronous notification engine using **Celery** and **Twilio APIs** for IVR, processing 1,000+ daily notifications across WhatsApp, SMS, and email alerts.
- Packaged multiple standalone executable binaries using **PyInstaller**, eliminating system dependencies and securing source code for multi-client deployment.
- Integrated real-time **WebSocket** communication, replacing 30-second polling intervals with continuous backend-to-UI data streaming for instant dashboard updates.

## PROJECTS

### Real-Time Chat Application

[GitHub](#)

- Built full-stack real-time chat application with **FastAPI/React** supporting 100+ concurrent users with sub-second WebSocket message delivery across multiple chat rooms.
- Architected multi-database system (**PostgreSQL, Redis, MongoDB**) with Redis for 24-hour quick message access and MongoDB for permanent chat history, supporting automated authentication and chat room management.

## ACHIEVEMENTS

- Earned four distinct accolades **Customer Appreciation, Ownership, Gratitude, and Confidence** Badges recognizing consistent delivery of high-quality solutions
- Earned **Extra Mile** recognition for surpassing delivery expectations and implementing real-time system optimizations that significantly improved industrial platform performance.

## CERTIFICATIONS

- System Design Masterclass (Udemy)
- Full Stack Web Development with Flask (LinkedIn)
- Learning Docker and Docker Compose (LinkedIn)
- Building a Backend REST API using Python and Django – Advanced (Udemy)