UTTKARSH RUPAREL

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LinkedIn · Portfolio · GitHub · LeetCode

Skills

Languages: Java, TypeScript, JavaScript, C/C++, Python, SQL
Backend & Databases: Node.js, Express.js, Redis, MongoDB, PostgreSQL, Supabase, BullMQ, Kafka
Infrastructure & DevOps: Linux, AWS, Docker, NGINX, PM2, Git, GitHub Actions, Terraform, Grafana, Prometheus, Kubernetes
Frontend: React.js, Next.js, Tailwind CSS
Foundations: System Design, Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Computer Networks, Database Management Systems

Projects

BitLink — URL Shortener & QR Code Generator
AWS, Node.js, Express.js, Redis

- Designed and deployed a **high-throughput URL redirection** service supporting short links, dynamic QR codes, and real-time analytics, with **stateless REST APIs** optimized for the redirect hot path.
- Sustained **10K+ concurrent requests** with **120–180 ms p95 latency under burst traffic**, achieved using **Redis-based hot-path caching, rate limiting, and EC2-hosted infrastructure behind an NGINX reverse proxy.**
- **Reduced synchronous request overhead by ~65%** by decoupling write-heavy analytics from redirect flows using **asynchronous background job processing**, with automated **Dockerized deployments via GitHub Actions–based CI/CD.**

Anchor — Automated Student Productivity Platform
Next.js, Supabase, Redis, GitHub Actions

- Built modular backend workflows for authentication, assignments, attendance, and scheduling using TypeScript, eliminating redundant queries and simplifying request paths across core features.
- **Improved API latency by ~80% (1500 ms → 250 ms) by introducing Redis-backed caching** and a **Token Bucket rate limiter (~50 requests/bucket)**, preventing backend overload during peak usage.
- Implemented **CI/CD pipelines using GitHub Actions**, enabling automated builds, tests, and deployments and reducing manual deployment effort to near zero.

GradCircle — Alumni Engagement & Donation Platform
ReactJS, Node.js, Express.js, Supabase

- Implemented secure backend services for **JWT-based authentication, RBAC**, donation workflows, and voicebot integration to support alumni engagement and contribution flows.
- **Reduced API response times by ~60% (400 ms → 150 ms)** during donation and alumni operations by **optimizing query patterns and introducing database indexing.**

Education

B.Tech in Computer Science & Engineering | **CGPA: 7.53**
Symbiosis Institute of Technology, Pune (2023 - 2027)
Higher Secondary Education | **Percentage: 85.5%**
Excellencia Junior College, Secunderabad (2021 - 2023)
Secondary Education | **Percentage: 85.5%**
Pallavi Model School, Secunderabad (2020 - 2021)

Leadership & Achievements

ACE 2.0 Finalist (September 2025) — Selected from over 400 teams for designing a smart-governance platform that unified key public services into a single system.

Competitive Programming Co-Head, GDSC SIT Pune (July 2025 - Present) — Organized coding contests, workshops, and mentorship sessions for 100+ students; supported problem-solving training and strengthened the community's CP engagement.