Parth Joshi

+91 8854897616 · jparth582@gmail.com · **Github** · **LinkedIn** · **Portfolio Website**

PROFESSIONAL EXPERIENCE

SDE | TakeTwoTechnologies
Jan 2025 - Present

Proctorlink | Link

- Owned and scaled backend systems supporting ~30,000 live exam sessions during peak operations.
- Improved concurrency from ~500 to ~1500 parallel operations through async pipeline and request-handling optimizations.
- Built real-time AI processing APIs for face detection, face matching, and activity analysis.
- Implemented Redis-based caching for embeddings and metadata, reducing redundant computation and improving latency.
- Designed a LiveKit-based pub/sub monitoring system enabling low-latency live proctoring and supervisor visibility.
- Led B2B production server setup and deployment for client institutions, ensuring secure, scalable, and isolated environments.
- Ensured production reliability via AWS auto-scaling (ASG + ALB), thread-safe CPU pipelines, and stress testing (JMeter).
- Tech: Python, Flask, Redis, OpenCV, InsightFace, LiveKit, Docker, AWS (EC2, ASG, ALB), Nginx

SDE Intern | Brainflow
Jul 2024 - Dec 2024

- Designed and implemented a scalable mobile-first frontend architecture using React Native, backed by backend services built using NextJs.
- Built FCM-based smart reminders, interactive planners (BigCalendar, GiftedCharts), and personalized cognitive-boosting routines, resulting in 70%+ productivity improvement and reduced test anxiety among mobile users.
- Tech: NextJs, React Native, Firebase (FCM), Nginx ,MongoDB
- Android App : **link**   IOS App : **link**

KEY SKILLS

- **Languages** - Python, JavaScript (JS), TypeScript (TS), C++
- **Frameworks**,:Node.js, Express.js, React.js, Next.js, React Native, Flask ,FastAPI, Django
- **Libraries:** Socket.io, JWT, OAuth2, Zustand ,Redux ,Tailwind CSS, Shadcn/UI, Axios , OpenCV, Dlib, MediaPipe, InsightFace
- **Databases :** MongoDB, Redis, Firebase, PostgreSQL, AWS S3
- **Deployement:** AWS,Docker, Nginx, GitHub Actions,Git & CI/CD, Apache

PROJECTS

PolyCode Arena (An Ecosystem for Educational Institutions) | Link:

- Built a scalable coding platform with a custom AWS Lambda–based custom coding engine(**Judge_1**), wallet system (platform currency), marketplace, and community contests. Integrated one-click certificate generation, live leaderboards(SSE), recruitment tools, and secure auth (JWT).
- Tech: AWS (Lambda, ECS, S3), Docker, Node.js, TypeScript, React, MongoDB, Python, CRON, HTML Canvas.

MapNest(Ai Map generator) | Link:

- Built MapNest, an AI-driven mind-mapping platform that converts user prompts into interactive visual maps with intelligent node structuring, map sharing and collaboration, OAuth login, and a modern, UI.
- Tech: Gemini API, React Flow, BFS traversal, OAuth (Google & GitHub), TailwindCSS, shadcn, Context API, Next.js, TypeScript.

HACKATHONS AND ACHIEVEMENTS

- **Create X Hackathon :** Achieved the **top** position(**Code Excellence Award**) .
- **Acehack 3.0:** Finished in the Top 5 among 130+ teams from all over India.
- **Hacktober Fest :-** org: **Appwrite** ,Developed appwrite functions that interact with vonage API and use Bun as runtime.
- **Hacker's Playground:-** Finished **Top 10** from a pool of **900 teams** from all over India.

EDUCATION

Bachelor of Technology
- Computer Science Engineering (IoT) , Rajasthan Technical University