Baltej Singh

+91 771-018-2206 | baltej963@gmail.com | linkedin.com/in/baltej-singh-7789b4313 | github.com/baltej223 | baltej.me

EDUCATION

Thapar University — Punjab, India
Bachelor of Technology in Computer Science — *Aug. 2024 – May 2028*

DAV Public School — Punjab, India
CBSE Senior Secondary Schooling — *May 2024*

TECHNICAL PROJECTS

Mirage AR Showdown | *Express.js, React, LocAr.js Firebase, Docker, Kubernetes, Three.js* — Nov 2025 - present
- Lead Full-Stack Engineer — Production TypeScript 3D/AR game (React, Vite, Kubernetes), Built AR chest rendering with live GPS to enable location-based 3D interactions for a college-wide event.
- Handled 2,000 concurrent users via a Kubernetes deployment for high throughput and resilience; automated CI/CD pipelines enabled rapid rollback and live remediation.
- Used Firebase Realtime Database for low-latency storage and real-time state synchronization across clients.
- Served as Technical Lead — designed and implemented 3D/AR mechanics using three.js and locAR.js, overseeing integration, asset pipeline, and cross-device performance optimizations.

Nodey — Cross-runtime Node.js + Python backend | *Docker, Docker-compose, Express.js, Flask* — April 2025
- Built a cross-runtime backend combining Node.js and Python microservices running concurrently in containerized environments and synchronized via a central load balancer.
- Implemented microservice endpoints across Node.js and Python backends and designed routing logic through a central load balancer to expose a consistent API to clients.
- Developed an internal API to enable secure, inter-container communication between Node.js and Python services using Docker networking.

ACHIEVEMENTS

Runner Up at IIIT Nagpur Web3 Hackathon — October 2025
IIIT Nagpur — *Nagpur, India*
- Developed Dexilo — a decentralized B2B music-collab platform on the Internet Computer enabling team project management, IPFS audio uploads, NFT minting/trading with waveform visuals, automated royalties, and on-chain provenance.

Finalist — February 2025
Thapar University — *Patiala, India*
- Secured Finalist spot among 3,000+ applicants at HackTU 2025, one of the North India's largest hackathon.

EXPERIENCE

Core Member & Mentor — September 2024 – Present
Creative Computing Society — *Patiala, India*
- Mentored 40+ juniors in WebDev fundamentals and DevOps practices, providing personalized guidance on technologies like React, Node.js, Containerization, Docker.
- Conducted 2 high-impact workshops on fullstack development and basic DevOps, attracting 200+ attendees each and fostering hands-on projects.

Full Stack Developer — Sep 2025 – Nov 2025
Saturnalia, Thapar University — *Patiala, India*
- Contributed to the official Saturnalia website—a flagship platform for Thapar's largest annual techno fest—handling user registration, event scheduling, and live updates for 5,000+ attendees.
- Worked in a 23-person dev team using Git for collaboration, and ensured uptime during the event

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Rust, Go, C/C++, HTML/CSS, Python
Frameworks: React, Node.js, Next.js, Flask, Express.js, Socket.io, Tailwind, Bootstrap, jQuery, Passport.js, Three.js
Developer Tools: Git, Docker, Kubernetes, Podman, VS Code, Postman, Supabase, NeoVim/Vim
Libraries: Pandas, NumPy, Matplotlib