UTTKARSH TYAGI

+91 9193399551 | uttkarsh25tyagi@gmail.com | LinkedIn | Github

Backend-focused developer building scalable server-side architectures, RESTful APIs, and real-time services. Experienced in authentication, database modeling, and cloud deployment. Recent IT graduate delivering production-ready backend systems.

EDUCATION

UTTARAKHAND TECHNICAL UNIVERSITY, DEHRADUN *Sep 2021 - July 2025*
B.Tech in Information Technology | CGPA: 6.5

DELHI PUBLIC SCHOOL RANIPUR, HARIDWAR
Class 12 | 88.4% Class 10 | 86%

SKILLS

Core Technologies: JavaScript, TypeScript, Node.js, Express.js, React, PostgreSQL, MongoDB, Prisma ORM, SQL
Backend Skills: REST APIs, WebSockets (Socket.io), JWT Auth, Google OAuth, RBAC, Caching, Database & Query Optimization
Tools & Deployment: Git/GitHub, Postman, Render, Vercel, HTML5, CSS3, Tailwind CSS

PROJECTS

Teamboard *Github Live Link*
Technologies: Node.js, TypeScript, React, PostgreSQL, Socket.io, Prisma

- Built a real-time messaging platform with optimistic UI updates and WebSocket communication using Socket.io, achieving <100ms perceived latency with automatic reconnection handling
- Implemented multi-layer caching strategy (IndexedDB + in-memory) with TTL-based invalidation, reducing API calls by ~60% and enabling instant UI updates with background data refresh
- Designed anonymous messaging system with role-based visibility where members see "Anonymous" while admins see actual senders, implementing dual-layer filtering (client-side UX + server-side security)
- Optimized React performance using React.memo on 6 components, 30+ useCallback handlers, and Intersection Observer API for intelligent prefetching, reducing unnecessary re-renders by ~70%
- Implemented database optimizations (8 strategic indexes, DB-level filtering, cursor-based pagination, connection pooling) and bulk operations using Prisma transactions, achieving <100ms query times and ensuring data integrity with real-time socket synchronization

Notesy *Github Live Link* *Technologies:*
React, Node.js, Express ,MongoDB, Tailwind CSS

- Built a production-ready sticky-notes application with infinite board and list views.
- Implemented JWT auth with bcrypt and RBAC; hardened with Helmet, CORS, rate-limiting.
- Designed REST API with CRUD and advanced querying (search/tags, pagination, filtering, sorting).
- Delivered fast UX: quick-capture (N), command palette, toolbar, snap-to-grid, pin/archive.

EXPERIENCE

Full Stack Developer Intern *Certificate* *July 2024 – Oct 2024*
Unlock Discounts, Bangalore (Remote)

- Built a **customer review section** using React, JavaScript, and CSS to enhance UI responsiveness.
- Developed APIs to fetch and display data from the company's database across platforms.
- Created a **certificate verification system** with unique codes for intern authentication.
- Attended team meetings to observe and learn startup management and leadership practices.

Project Intern *Certificate* *July 2024 – Aug 2024*
BHEL, Haridwar

- Observed workflows within a large government tech department.
- Spoke with team members to understand how the tech department works and how systems are managed in practice.
- Developed a web portal for managing electronic equipment issuance with late tracking and recipient records.
- Used HTML, CSS, and React to build a user-friendly interface, and implemented SQL for backend data handling.