

Touseef Ahmed

Full-Stack Developer

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SKILLS

Languages: JavaScript, TypeScript, Python, Go (Golang), C#, PHP, HTML, CSS, SQL

Frontend: React, Angular, Next.js, Redux Toolkit, RxJS, Tailwind CSS, Bootstrap

Backend: Node.js, .NET, Django (WSGI/ASGI), Django Channels, REST APIs, WebSockets, MQTT, real-time systems architecture

Databases: MongoDB, SQL

DevOps & Cloud: AWS EC2, Kubernetes, Docker, CI/CD pipelines (GitHub Actions), LiveKit, custom auto-scaling infrastructure

Testing & Tooling: Jest, Git, Jira, Confluence, Figma

Spoken Languages: English (C1), German (B1)

EXPERIENCE

Full-Stack Developer — Infinitech | Islamabad, Pakistan | Jul 2023 – Oct 2025

- Independently designed, built, and maintained the backend architecture for a live services application serving 100,000+ users — using Django, Node.js, and .NET across services, including real-time socket infrastructure, transaction APIs, admin-configurable dynamic features, and subscription-based feature entitlements.
- Built the platform's frontend across React, Next.js, and Angular, and built talent and agent dashboards integrating real-time data from core platform APIs.
- Implemented real-time WebSocket communication using Django Channels, then implemented end-to-end encrypted messaging using client-side RSA key management, and led the migration of the messaging layer from WebSockets to MQTT to improve delivery reliability and reduce connection overhead at scale.
- Built a custom inter-room communication service in Golang for low-latency message routing across isolated chat and streaming sessions.
- Designed and delivered backend systems for four integrated in-app games, including real-time multiplayer logic for card and casino-style games (Teen Patti, Roulette) and a dedicated Ludo game engine with autonomous bot/AI players.
- Deployed and operated a self-hosted LiveKit media server on AWS with a custom auto-scaling system that preemptively scales infrastructure based on connection growth trends, active connections, and failure rates — reducing latency during traffic spikes.
- Set up a full CI/CD pipeline using GitHub Actions covering multiple sections of the application, including a dedicated automated test suite for the game backends, significantly reducing bugs reaching production; led and mentored a development team through structured Jira ticketing, documentation, and sprint record-keeping.
- Implemented global state management with Redux Toolkit (React) and RxJS (Angular), and built responsive UIs with Tailwind CSS and Bootstrap.

Frontend Developer — Techception | Islamabad, Pakistan | Oct 2022 – May 2023

- Built CMS and business-profile web applications with Next.js, including REST APIs backed by MongoDB to support dynamic client content.
- Maintained PHP backends covering authentication, role- and permission-based access control and transaction processing.
- Wrote unit and integration tests with Jest, containerized applications with Docker, and used the Atlassian toolchain (Jira, Confluence) for day-to-day project management.

Web Developer — Kreative Ally | Islamabad, Pakistan | Oct 2021 – Sep 2022

- Developed and maintained business websites and CMS platforms using React, Webflow and WordPress, working from Figma prototypes provided by the design team.
- Collaborated closely with designers to refine Figma mock-ups and keep implementation aligned with the intended UX, and wrote unit and integration tests to support long-term maintainability.

PROJECTS

Miro Lite — Real-Time Collaborative Whiteboard

github.com/Touseef-R64/Colaborative-workstation

- Built a self-built, from-scratch clone of the core Miro/FigJam experience end to end — teams create boards, invite each other, and draw together in real time on an infinite canvas — using Next.js 15, TypeScript, Zustand, React Query and Konva.js on the frontend and Django, Django REST Framework, Django Channels and Celery on the backend, fully containerized with Docker Compose (PostgreSQL, Redis, Celery worker).
- Implemented real-time multi-user canvas sync over WebSockets (Django Channels + Redis), broadcasting element create/update/delete events to every connected client with per-element locking to prevent conflicting concurrent edits.
- Built a full JWT-based auth system with a background scheduler for automatic token refresh, per-board membership/roles, and a debounced invite flow; designed an undo/redo system using before/after snapshots that uniformly reverses creates, deletes, moves and text edits; and built core drawing tools (select, sticky notes, rectangles, freehand pen, text) with marquee/group selection, group-drag, and inline text editing synced live across clients.

EDUCATION

M.Sc., Research in Software and Systems Engineering — Technische Universität Ilmenau

Ilmenau, Germany | Oct 2025 – Present

B.Sc., Computer Science — Bahria University

Islamabad, Pakistan | Feb 2018 – Feb 2022