

ARITRA SARKAR

Kolkata, West Bengal

📞 +91 6289982251 ✉ aritrasarkar07.work@gmail.com [in](#) [Linkedin](#) [G](#) [Github](#) ⚡ [Website](#)

Education

Jadavpur University

Bachelor of Engineering in Information Technology

October 2023 - Present

CGPA : 8.34

Calcutta Boys' School

ISC

April 2022 - March 2023

90%

Calcutta Boys' School

ICSE

April 2020 - March 2021

98%

Projects

AritraDocs | *TypeScript, NextJS, Tailwind CSS, Clerk, Liveblocks* | [🔗](#) | [📄](#)

July–August 2024

- Developed a collaborative documentation tool supporting 100% real-time sync across users with multi-room access control.
- Integrated Clerk authentication, enabling secure logins and dynamic permission management across custom groups.
- Achieved < 200ms live update latency using Liveblocks + Lexical for shared presence and editing.
- Built a responsive UI with Radix UI and Lucide, and integrated Sentry for production-grade monitoring.

AI Shopping Assistant | *TypeScript, NextJS, Tailwind CSS, Prisma, Formidable* | [🔗](#) | [📄](#)

July–August 2025

- Built an AI-powered visual product recommendation system with Next.js, supporting image, voice, and text inputs via responsive UI components (chat, upload, preview); improved user engagement by 30% during testing.
- Integrated audio transcription directly in the frontend by sending audio to a Flask backend running OpenAI Whisper ASR(model :small), enabling voice-to-text shopping queries and enhancing accessibility.
- Streamlined file uploads (image/audio) with Formidable, managed state centrally for real-time updates, and optimized build time by 40% using Turbopack and custom ESLint rules.
- Connected to a Prisma-backed FastAPI system via structured API modules for recommendations and transcription, with complete TypeScript typing and 100% linting compliance.

Open Live Chat App | *React, Express, MongoDB, Socket.io, JWT* | [🔗](#) | [📄](#)

October–November 2024

- Developed a scalable chat app enabling anonymous real-time communication for 100+ concurrent users.
- Implemented secure JWT auth with bcrypt-hashed passwords and session management.
- Enabled live user-to-user messaging with persistent storage via MongoDB and updates via Socket.io.
- Structured project into frontend-backend monorepo with nodemon-powered dev workflow.

Technical Skills

Languages: C++, C, Java, JavaScript, TypeScript, SQL

Technologies/Frameworks/Libraries: Next.js, React.js, Express.js, Node.js, Tailwind CSS, MongoDB

Operating System: Windows, Linux

CS Fundamentals: Database Management System, Data Structures and Algorithms, Object Oriented Programming, Computer Networks, Operating System

Soft Skills: Problem Solving, Leadership, Communication

Achievements

- Achieved a highest rating of **1444 (Specialist)** on Codeforces, ranking in the top 15% among global competitive programmers.
- Reached a peak rating of **1755 (3-star)** on CodeChef, solving advanced DSA problems under timed constraints.
- Secured **1st place** in HackForge, leading the development of a Web3-integrated gaming platform with tokenized content and in-app video calling.

Profile Links

- Codeforces
- Leetcode
- CodeChef