# Lakshya Singh

#### Education

University Of Mumbai 2022 – 2026

Bachelor of Engineering in Computer Science Engineering CGPA: 8.5 (Till 5th Semester)

#### Relevant Coursework

Data StructuresAlgorithms

• Operating Systems

• Computer Networks

• DBMS

• Artificial Intelligence

• Software Engineering

Theory Of Computation

## Experience

Jr. Secretary

November 2024 – January 2025

OWASP TCET

Mumbai, Maharashtra

• Served as Junior Secretary, representing OWASP TCET, managing college-related matters, and facilitating events.

- · Coordinated with college faculty and club members to organize workshops, meetings, and tech talks, enhancing club visibility.
- Managed documentation and communication within the club, ensuring efficient dissemination of information and updates.

### **Projects**

#### Decentralized NFT Trading Communication Platform | Solidity, Ether.js, Node.js, Socket.io, Hardhat

- Developed a blockchain-based platform where NFT holders can securely connect and engage in conversations.
- Integrated wallet connection functionality to verify NFT ownership and grant access to exclusive channels.
- Implemented real-time communication using Socket.io, ensuring seamless participant interaction.
- Built NFT trading channels directly within the platform, allowing users to buy, sell, and trade NFTs.
- Impact: Enhanced utility of NFTs through secure, decentralized communication, fostering exclusive community interaction.

#### DankTube | Socket.io, Node.js, WebSocket, ReactJs,

- Built a full-stack YouTube clone with core features such as video uploads, playback, comments, and likes, providing an intuitive and responsive user experience.
- Implemented real-time chat and notifications using Socket.io, enhancing user engagement and interactivity.
- Integrated **FFmpeg** for efficient video processing, including compression and format conversion to optimize performance.
- Designed a scalable backend with Node.js, Express.js, and MongoDB, ensuring seamless data management and API efficiency.

#### BookOfRecords | Node.js, Express.js, MongoDB, EJS, REST APIs

- Engineered a full-stack CRUD application for comprehensive digital record management, providing an intuitive interface for users to add, update, view, and delete records.
- Used EJS for server-side rendering to create a smooth, interactive front-end experience.
- Designed and implemented RESTful APIs to enable seamless data communication between the frontend and backend, ensuring fast, reliable data transactions.
- Impact: Streamlines the management of personal or organizational records, making it suitable for companies or individuals needing an efficient, organized system for large datasets.

#### ChatterLive | Node.js, Express.js, JavaScript, WebRTC, Tailwind CSS

- Built a real-time video chat platform using WebRTC, enabling users to communicate seamlessly over high-quality peer-to-peer video calls.
- Designed the backend with Express.js to handle routing and signalling, ensuring fast and responsive connection establishment between users.
- Optimized the user interface with Tailwind CSS, providing a sleek, fully responsive experience across devices, tailored for ease of use during video sessions.
- Impact: This app provides a smooth, real-time video interaction experience, making it ideal for social interactions, virtual meetings, or tutoring sessions without the need for any downloads or plugins.

#### Programming Skills

- Languages: Java, JavaScript, TypeScript, Rust
- Databases: MongoDB, PostgreSQL
- Tools & Frameworks: Git, Docker, NextJs, ExpressJs, Ethers.Js, Web3.js
- Platforms & Environments: Linux, AWS, Google cloud platform