# Lakshya Singh

#### Education

Thakur College of Engineering and Technology

Bachelor of Engineering in Computer Science and Engineering

## Experience

OWASP TCET Junior Secretary

- 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.
- Supported senior leadership in event planning, logistics, and outreach to foster community engagement within the club.

# **Projects**

Decentralized NFT Communication Platform | Solidity, Ethers.js, Node.js, React.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.

### **AuthApp** | Node.js, Express.js, MongoDB, JWT

- Developed a secure authentication API designed for modern web applications, providing endpoints for user registration, login, JWT-based session management, and password reset functionality.
- Implemented token-based authentication to secure user data, prevent unauthorized access, and enable compliance with industry security standards.
- Enhanced password security by integrating encryption for storage, ensuring confidentiality and minimizing risk of breaches.
- Impact: Provides a robust, secure authentication system that can be easily integrated into any web application, improving user data security and simplifying login flow management for developers.

#### 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.

#### 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.

# Technical Skills

Languages: JavaScript, C, Rust, Golang, Solidity, HTML, CSS

Frameworks/Technologies: Node.js, Express.js, React.js, Web3.js, MongoDB, REST APIs, Tailwind CSS, Bootstrap

Developer Tools: VS Code, IntelliJ, Git, Google Cloud Platform

Soft Skills: Agile, Organized, Reliable, Communication, Teamwork, Adaptability, Problem-Solving, Initiative, Attention to

Detail

Concepts: Full-Stack Development, Authentication Systems, Blockchain, API Development, Agile Methodologies