# HAMZA MUBIN

## **Education**

## Institute of Engineering and Technology, Lucknow

Bachelor Of Technology (CSE) | Graduation: 2026 | GPA: 8.1/10

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Databases, Computer Networks.

## **Skills**

- Programming Languages: Python, JavaScript, Java, C
- Backend Development: Node.js, Express.js, Next.js, Prisma
- Databases & Tools: SQL, MongoDB, Docker, Github
- Web Development: React.js, HTML, CSS, GSAP
- Machine Learning: TensorFlow, Keras, Scikit-learn, numpy, pandas
- Competitive Coding: CodeChef (Max Rating 1672, 3 star), HackerRank (Gold Badge, 5 star)

## **Work Experience**

## **Backend Developer Intern** | *Matrix Innovation*

Dec 2024 - Present

- Engineered and Optimized backend API performance, reducing response times by 35% through query indexing and browser local storage caching.
- Engineered real-time matchmaking & session management for a Unity-based 3D basketball game, improving match success rate by 40%.
- Improved database query efficiency by 50%, leading to faster data retrieval and smoother gameplay.

### **Contributor** | *GSSoC-Extended* 2024

Oct 2024 – Nov 2024

- Contributed 22 merged pull requests across various open-source projects, demonstrating proficiency in GSAP animations and backend development.
- Achieved rank 109 out of 3,900 active participants, showcasing consistency and impactful contributions.

# **Technical Projects**

## SpaceHm: NASA Explorer / React.js, HTML, CSS

- Built an interactive NASA resource platform, integrating NASA's API for real-time space data access.
- Optimized API calls, reducing data-fetching time by 40%, improving user experience.
- Developed an interactive image gallery with search, filtering, and download features, enhancing engagement.
- GitHub Link: SpaceHm, Website Link: SpaceHm

### HamGram: A Social Media App / React.js, Node.js, Express.js, MySQL

- Designed a scalable backend handling concurrent users and thousands of daily interactions.
- Implemented secure JWT authentication and bcrypt hashing, improving user security.
- Optimized SQL queries, reducing database response time for smoother user interactions.
- GitHub Link: HamGramUI & HamGramAPI

#### HamVerse: 2D Metaverse | Node.js, PostgreSQL, Prisma, React.js, WebSockets, Jest

- Developed a real-time collaborative environment with WebSockets and PostgreSOL, supporting dynamic user interactions.
- Designed and tested scalable APIs with Prisma ORM, implementing Test-Driven Development (TDD) using Jest.
- Built an interactive frontend canvas, supporting user movement and engagement in the virtual world.
- · GitHub Link: HamVerse

### **Awards & Achievements**

- · Secured Rank 207 in CodeChef Starter 156 Div 3.
- Recipient of the Reliance Foundation Scholarship, awarded to the top 5,000 students in India for exceptional performance in an aptitude test and academic dedication.

### **Certifications**

- "Machine Learning specialization" by Stanford University & DeepLearning.AI on Coursera | Certificate
- "Prompt Engineering" on Udemy | Certificate