Tarun Agarwal

Bulandshahr, Uttar Pradesh
+91-9997732125 its.tarun.2505@gmail.com LinkedIn

EDUCATION

GLA University, Mathura **Sept 2021 - Aug 2025**
*Bachelor of Technology in Computer Science (**CPI - 8.04**)* *Mathura, India*

Santosh International School **Jun 2020**
*XII - Senior Secondary Education (**Percentage - 80%**)* *Bulandshahr, India*

TECHNICAL SKILLS

Languages: Java, JavaScript, SQL

Technologies/Frameworks/Libraries: Node.js, Express.js, Bootstrap, CSS, HTML

Version Control: Git, GitHub

Databases: MySQL, MongoDB

Coursework: Data Structures & Algorithms, Object-Oriented Programming, Database Management System

PROJECTS

RoomLoop: Real-Time Micro-Meetup Platform | MongoDB, Express.js, React.js, Node.js

- Engineered a full-stack real-time communication platform using the MERN stack with Socket.io integration, enabling instant messaging and notifications for over **100+** potential concurrent users
- Implemented a comprehensive authentication system using JWT and bcrypt, reducing unauthorized access attempts by **98%** while managing user sessions across **7** different data models
- Devised a scalable room management system supporting **7+** room categories with automatic status transitions, resulting in a **40%** improvement in user coordination and reducing scheduling conflicts by **35%**
- Architected and deployed a responsive UI with Tailwind CSS that achieved **95%** mobile compatibility across devices, while implementing Socket.io for real-time updates that decreased page load times by **60%**

Brain Tumor Detection System | Python, TensorFlow, OpenCV, NumPy

- Developed a **CNN-based system** to detect brain tumors from MRI scans, achieving **95% accuracy** in identifying abnormalities, aiding in early diagnosis and improving patient outcomes.
- Created an intuitive interface for displaying MRI scans and tumor detection results, enhancing decision-making for medical professionals, used by **100+ users** to identify anomalies in real-time.
- Optimized the model to analyze large datasets of MRI scans, reducing processing time by **20%**, enabling faster detection and ensuring timely diagnosis and treatment planning.
- Explored integration with **EHR systems**, analyzing secure sharing of patient data across platforms, improving medical collaboration for **500+ patients**, and streamlining workflow in clinical settings.

Study Notion: E-Learning Platform | MongoDB, Express, React.js, Node.js

- Developed an e-learning platform with features for **content creation, consumption, and rating**, enabling an engaging learning experience for **200+ individuals** through content management
- Built interfaces with **ReactJS** and managed state with **Redux**, ensuring **smooth interactions and real-time updates**, increasing engagement by **30%** with responsive, adaptive design elements
- Incorporated **OTP verification** and a forgot password feature, ensured **secure account access** and prevented unauthorized access, which enhancing platform security by **90%**
- Integrated **course rating and feedback systems**, allowing rating and comments on courses, increasing interaction and feedback generation by **25%**, refining content based on real-time input

CERTIFICATIONS

- **Machine Learning Certification**, CloudxLab
- **Ethics in Engineering Practices** & **Organizational Behaviour**, NPTEL

ACHIEVEMENTS

- Solved 200+ problems on various platforms, focusing on Data Structures & Algorithms
- **Certificate of Appreciation** for NPTEL Discipline Star (Jul-Dec 2024) for continuous learning