# **SHRUTI GUPTA**

GitHub | In LinkedIn | ■ gshruti779professional@gmail.com | J+919628775335 | ③ Portfolio

### **PROFESSIONAL SUMMARY**

Master of Computer Applications (MCA) graduate with hands-on experience in full-stack web development using the MERN stack (MongoDB, Express.js, React.js, Node.js). Built responsive, feature-rich web apps focused on performance and usability. Applied machine learning and NLP techniques in real-world projects for image detection and AI-driven user experiences. nEager to contribute to scalable, data-driven software systems.

### **EDUCATION**

• National Institute of Technology, Raipur Master Of Computer Applications (MCA) - 7.85 CPI Raipur, Chhattisgarh Aug 2023 – present

• Modern Girls College of Professional Studies, University of Lucknow Bachelor Of Computer Applications (BCA) - 79.08%

Lucknow, Uttar Pradesh

Aug 2020 - Aug 2023

### **TECHNICAL SKILLS**

- Frontend: HTML5, CSS3, Tailwind CSS, JavaScript (ES6+), React.js, Streamlit
- Backend: Node.js, Express.js, RESTful APIs
- Databases: MongoDB, SQL
- Real-Time Technologies: WebSocket, Socket.io
- **Programming Languages:** Java, Python
- Machine Learning/NLP: Machine Learning (ML), YOLO, OpenCV
- **Version Control & Cloud:** Git, GitHub, AWS(EC2)
- **Core Concepts:** Object-Oriented Programming (OOP), Data Structures and Algorithms (DSA), Database Management Systems (DBMS), Operating Systems (OS), Computer Network (CN).

### **PROJECTS**

### • CodeCast - Real-Time Code Editor | github

Apr 2025 - May 2025

Self-Project | React, Bootstrap, Socket.io

- Enabled seamless real-time code sharing, with 10+ edits per second synchronized across all active users
- Achieved <200ms sync latency for live code changes via WebSocket-based communication</li>
- Designed and optimized an Express.js backend to handle 50+ concurrent socket connections with zero data loss and 99.9% uptime
- Supported live collaboration of 50+ users in parallel sessions with seamless code broadcasting

# • TripMaster AI - AI-Based Travel Planning App | github

Jan 2025 – Feb 2025

- ${\it Self-Project \mid React.js, Tailwind CSS, Gemini~API, Firebase}$
- Generated AI-powered travel plans by integrating Gemini API with location-based data and user preferences, enhancing trip accuracy by 30%
- Reduced planning time by ~80% by auto-suggesting hotels, activities, and daily itineraries
- Designed a 100% mobile-responsive frontend and integrated Firebase to enable real-time data sync users, reducing load time by  $\sim\!25\%$
- Delivered end-to-end full-stack functionality with React frontend and Gemini 2.5 Flash for handling upto 250 requests/day

### • Airport & Runway Detection from Aerial Images

Jul 2025 - Present

Self-Project | Python, YOLOv11, OpenCV, Streamlit

- Detected airports and runways from satellite images with 92%+ accuracy using YOLOv11 object detection
- Preprocessed input images with OpenCV for improved model precision and annotation clarity
- Deployed the model on a Streamlit web app supporting real-time image upload and prediction
- Reduced false detection rate by  $\sim$ 25% through iterative tuning and dataset augmentation

## **ACHIEVEMENTS & CERTIFICATIONS**

• Secured All India Rank (AIR) 600 in the NIT MCA Common Entrance Test (NIMCET).

Jun 2023

• 5-Star Java Programmer & SQL Programmer on HackerRank. [View]

Jul 2025

• Achieved SQL (Intermediate) Certificate from HackerRank. [View]

# Jul 2025

#### **VOLUNTEER EXPERIENCE**

• Cultural Committee Volunteer, ICAIHC-2025 Conference, IEEE & NIT Raipur.

Jan 2023