Rishit Tandon

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PROFESSIONAL SUMMARY

Third-year Computer Science student with growing experience in AI/ML, Computer Vision, IoT, and full-stack development. Skilled in Python, C++, Java, JavaScript, SQL, and building beginner-to-intermediate software projects including AI tools, IoT systems, automation platforms, and real-time applications. Strong problem-solving, fast learning, and debugging abilities with a passion for turning ideas into practical, user-focused solutions. Actively developing industry-relevant skills and eager to contribute to real-world engineering projects.

EDUCATION

SRM Institute of Science and Technology   2023 – 2027 (Expected)
B.Tech Computer Science & Engineering   CGPA: 7.76/10.0
Selective Industry Coursework: Metaverse (Top 80/Batch) & Responsible AI (Top 120/Batch) – Faculty Selected.

Delhi Public School, Lucknow   2023
Senior Secondary (XII)   CBSE Science

Seth M. R. Jaipuria School, Lucknow   2021
Secondary (X)   ICSE

CERTIFICATIONS

- Machine Learning (NPTEL) – IIT Kharagpur

- Python for Data Science, AI & Development – IBM

- Unity Essentials – Unity Technologies

- Database Management Systems (DBMS) – Udemy

- Machine Learning Bootcamp (Arcade Intelligence) – Next-Gen AI, SRM IST

- Learn Ethical Hacking From Scratch – Udemy

TECHNICAL SKILLS

AI/Gen AI & ML: TensorFlow, PyTorch, OpenCV, NLP, LLMs (Llama), Scikit-learn.

Programming Languages: Python, C++, JavaScript, SQL, C, Java.

Web & Cloud: REST APIs, MySQL, Docker, HTML5, CSS, Git/GitHub.

IoT & Embedded: IoT Digital Twins, ESP8266, Arduino, Unity (Simulations).

PROFESSIONAL EXPERIENCE

Software Development Intern   May 2025 – July 2025
DGTL Innovations

- Engineered high-performance REST APIs using Python and MySQL, reducing query response time by 20%.

- Designed responsive frontend components using HTML, CSS, and JavaScript, increasing user retention by 15%.

- Streamlined development workflows using Git and participated in rigorous code reviews (99% code stability).

Research Intern – ML & Image Processing   Oct 2025 – Present
SRM IST in collaboration with NIDM   *Kattankulathur, TN*

- Spearheading R&D for Glacial Lake Outburst Flood (GLOF) detection using Deep Learning on satellite imagery.

- Developing automated pipelines to monitor glacial expansion, enhancing hazard detection accuracy by 15%.

- Optimizing CNNs for geospatial data, reducing alert generation latency by 40% for disaster response.

KEY PROJECTS

LinkedOut: AI Content Automation | *React, Node.js, Gemini AI, OAuth*

- Built a full-stack automation platform integrating LinkedIn OAuth and Gemini AI for autonomous post captioning.
- Implemented background cron jobs and real-time dashboards, reducing manual content management time by 40%.

VaxTrack: Multilingual Vaccination Tracking | *Twilio API, QR Codes, Offline-First*

- Developed a QR-based vaccine tracking platform featuring one-tap updates and automated SMS reminders via Twilio.
- Designed an offline-first architecture with real-time dashboards to assist rural healthcare workers and NGOs.

EduStream: Virtual Classroom Platform | *Java, Python, Video Streaming*

- Built a virtual classroom app enabling content sharing and live video classes using Java and Python-based video calling.
- Implemented role-based access for teachers to manage study materials and students to join sessions via classroom codes.

Dual-Persona AI: Negotiation Bot | *Python, Google Gen AI SDK, Agentic AI*

- Architected a Multi-Agent System using Google Gen AI SDK, deploying distinct Buyer, Seller, and Mediator agents.
- Integrated live product scraping where the Mediator agent resolves budget vs. profit conflicts with 90% consensus.

Fake News Detector: Multilingual ML System | *Python, NLP, Scikit-learn, Transformers*

- Developed a robust fake news detection system trained on a massive **1.4 Million record dataset**.
- Implemented multilingual support for **Hindi and English** news verification using advanced NLP pipelines, achieving high classification accuracy.

AI Smart Glasses (AISGR) | *LLaMA 3.2 Vision, Python, OpenCV*

- Built a wearable AI interface leveraging LLaMA 3.2 Vision for real-time object recognition and gesture ROIs.
- Optimized vision pipeline to achieve <200ms latency, enabling seamless assistive interaction.

Multiverse: IoT Digital Twin Platform | *Unity, C#, Cloud APIs*

- Architected a real-time Digital Twin syncing physical sensors with a Unity 3D environment via Cloud API.
- Enabled bi-directional communication for 50+ nodes, improving monitoring efficiency by 40%.

Kisan Vikas: IoT Smart Farming & Chatbot | *IoT Sensors, Python, LLM Chatbot, ESP32*

- Developed an end-to-end smart farming assistant monitoring soil moisture, pH, and light via ESP8266/ESP32 sensors.
- Integrated a Multilingual AI Chatbot to provide real-time recommendations in 5 languages (Hindi, Tamil, Telugu, etc.).
- Built a local dashboard for real-time sensor alerts (irrigation needs, soil imbalance), bridging the gap between IoT data and user action.

WhatsApp Temple-Food Notifier | *Twilio API, Python/Java, Webhooks, Ngrok*

- Built an automated WhatsApp chatbot using Twilio APIs to notify users about free food (prasadam) distribution events.
- Implemented a backend service that programmatically triggers broadcasts and handles location-based queries via webhooks.
- Designed for high availability with offline capabilities via localhost tunneling (Ngrok), demonstrating robust automation logic.

AWARDS & ACHIEVEMENTS

- **1st Place:** SUTD Smorphi (Singapore), CismoHack (National Level), ML Project Expo (College Level), South India Conclave, Semiconductor Expo, NWC Expo.
- **2nd Place:** C.Tech Project Expo, Arduino Hackathon, SUTD Smorphi (Category).
- **Top Ranks:** 3rd at BIS Hackathon, 4th at Hack Sustain, 5th at SRM Founder's Hackathon.