

Vedant Gupta

Roll No.: 23/IT/174

Bachelor of Technology (Information Technology)

Delhi Technological University (Formerly DCE)

+91-8800521467

guptavedant2005@gmail.com

GitHub | LinkedIn

Education

B.Tech in Information Technology, Delhi Technological University 2023 – 2027
New Delhi **CGPA: 8.02**

Ryan International School, Mayur Vihar 2020 – 2022
AISCE (X): 89.6% | AISSCE (XII): 89.6%

Experience

Backend Developer Intern July 2025 – September 2025
Paytm – OCIL Department Remote

- Developed and optimized **RESTful APIs**, reducing average API latency by **15%**.
- Built scalable backend services using **Java and Spring Boot** for applications serving **10,000+ users**.
- Optimized relational database queries to efficiently process **1M+ transaction records**.

Projects

AgriTech Pro – AI Precision Agriculture Platform *Live Website*
YuvAi Global Youth Challenge Finalist – India AI Impact Summit 2026 (Certificate)

- Pitched and showcased the solution on stage at **Bharat Mandapam, New Delhi**, presenting an AI-driven precision agriculture platform focused on inclusive farming.
- Engineered a **CNN–LSTM model** enabling real-time crop health monitoring and early stress prediction **7–15 days prior to visible damage could take place**, using Sentinel-2 satellite imagery.
- Built a scalable full-stack system using **React, TypeScript, Node.js, Flask, PyTorch, MongoDB** with satellite-based vegetation indices (**NDVI, NDMI, EVI**) and 3D terrain visualization.
- Designed a hybrid microservice architecture with an **Express.js API gateway** and secure ML services using **JWT authentication**.

Smart Vehicle Tracking System (ANPR) *DTU Campus*
Tech Stack: YOLO, Tesseract OCR, Jetson Nano, OpenCV

- Designed and deployed an end-to-end ANPR system using YOLO for detection and Tesseract OCR for recognition.
- Executed real-time inference on **NVIDIA Jetson Nano** for low-latency edge processing.
- Implemented automated vehicle tracking under the supervision of the **Head of Department (IT)**.

Technical Skills

Programming Languages: TypeScript, JavaScript (ES6+), Python 3.9+, Java

Frontend: React 18, Vite, Tailwind CSS, shadcn/ui, Framer Motion, React Router, React Query, Context API

Backend: Node.js, Express.js, MongoDB, Mongoose, JWT, bcrypt, Socket.IO

Python & ML: Flask, PyTorch, NumPy, SciPy, pandas, scikit-learn, Keras

System Design: RESTful APIs, Microservices Architecture, API Gateways, Authentication & Authorization, Scalability Concepts

Model Architectures: 3D CNN, LSTM, CNN–LSTM Hybrid Networks

Leadership & Responsibilities

Vice President 2024 – Present
NeuralAI Society, DTU

Achievements

- Solved **300+ LeetCode problems**.
- **1500+** rating at **codeforces**