

TARANDEEP SINGH JUNEJA

Phone: +91-9098520440 | Email: tarandeepjuneja11@gmail.com | LinkedIn: linkedin.com/in/tarandeep-singh-juneja-55542424b | GitHub: github.com/tsj2003 | Portfolio: portfoliobytsj.netlify.app

Summary

Final-year B.Tech Computer Science and Engineering student at Vellore Institute of Technology, experienced in software engineering, machine learning, and full-stack development. Interned at IIT Bombay and contributed to an international Omdena team on real-world AI solutions. Finalist in HackWithInfy and ranked **360 globally** in Meta Hacker Cup. Built production-grade systems including CNN audio classification, credit-fraud detection, and a full-stack AI document generator. Strong foundations in algorithms, problem-solving, scalable backend development, and model deployment.

Experience

FOSSEE Summer Intern — Python Developer <i>IIT Bombay</i>	Feb 2025 – Jun 2025
– Implemented structural computation modules in Osdag using IS 800:2007, improving reliability for 10,000+ engineers. – Built constraint-driven UI validation (freeze/unfreeze) preventing invalid states and improving debugging speed. – Wrote reusable Python modules aligned with SDLC practices, improving maintainability and testability. – Collaborated in iterative engineering cycles focusing on correctness, stability, and clean code practices.	<i>Mumbai</i>

Projects

AI Document Generator — FastAPI, React, Gemini, HuggingFace [GitHub] [Live Demo]	Sep 2025
– Architected full-stack AI document generator with FastAPI backend (1,655+ LOC), React frontend (1,137+ LOC), 17 REST endpoints, and 6-table relational database using SQLAlchemy ORM. – Integrated Gemini 2.5-Flash + HuggingFace SDXL with a 3-tier fallback pipeline enabling automated content generation and contextual image creation with high reliability. – Implemented section-wise refinement system, 41 modular Python functions, and robust error-handling for predictable, testable SDLC workflows. – Deployed production-ready DOCX/PPTX export platform with JWT auth, responsive React UI (10+ components), and live deployment on Netlify + Render.	
AutoReach AI — Python, Gmail API, Jinja2 [GitHub]	Oct 2025
– Built automation pipeline sending 2,900+ personalized emails with 90% delivery reliability. – Implemented batching, fail-safe retries, and concurrency-safe scheduling for stability. – Designed modular, testable backend architecture aligned with SDLC and clean-code patterns. – Used OAuth2, templating, and CSV-driven dynamic content generation.	
CNN Audio Classifier — PyTorch, FastAPI, Modal [GitHub]	July 2024
– Trained custom CNN on ESC-50 using Mel-spectrograms, achieving 83.5% accuracy with reproducible ML pipeline. – Deployed low-latency inference API on Modal GPU with FastAPI backend and asynchronous request handling. – Built lightweight debugging + visualization tools (spectrograms, feature maps) to improve model explainability.	

Technical Skills

Languages: Python, C++, SQL
Engineering Fundamentals: Data Structures, Algorithms, Operating Systems, Computer Networks, Debugging, SDLC, Problem Solving
Backend Development: FastAPI, REST APIs, Jinja2
Machine Learning: PyTorch, TensorFlow, CNNs, Scikit-learn
Tools: Git, Modal, Postman

Education

Vellore Institute of Technology <i>B.Tech Computer Science and Engineering</i>	2022 – 2026
	<i>CGPA: 8.51 / 10</i>

Certifications & Achievements

- Meta Hacker Cup 2025 — Global Rank **360** [Certificate]
- Infosys HackWithInfy 2025 — Finalist
- Adobe GenSolve Hackathon — Top 5% [Certificate]
- Oracle Autonomous Database Cloud Professional — 2025 [Certificate]
- Oracle OCI Generative AI Professional — 2025 [Certificate]
- Postman API Student Expert — 2024 [Certificate]
- Codolio Coding Profile [Link]