

# Neka S

Sattur, India

+91-8838342591

neka7103.s@gmail.com

/neka-7103

/neka-s

## Education

### VIT Bhopal University

B.Tech (CSE BHI)

CGPA: 8.40

Sep 2022 – Jun 2026

### LLB Shastri Public School

Class 12, CBSE (PCMB)

Percentage: 79.2%

May 2020

### LLB Shastri Public School

Class 10, CBSE

Percentage: 81.2%

March 2018

## Technical Skills

- **Languages:** Python, Java
- **Developer Tools:** Git, n8n, VS Code, Postman, Jupyter
- **Technologies & Frameworks:** FastAPI, REST, LangGraph, Hugging Face, RAG pipelines, vector databases, PyTorch, Pandas, NumPy, Matplotlib




## Internship

### VIT Bhopal University — Technical Assistant – Python Course (VITYARTHI)

Oct 2023

- Led a team of 10+ peers for end-to-end course content creation, including planning, recording, scripting, and content finalization for the Python module.
- Managed the Python course video production pipeline that was delivered to over 2000 students, ensuring timely delivery and high content quality.
- Coordinated with faculty and technical staff to streamline assignment design, review workflows, and student doubt resolution processes.

## Projects

- **Tera-agro**  Python, PyTorch, FastAPI, Computer Vision, YOLO, LangGraph, REST APIs May 2025
  - Led an 8-member cross-functional team across AI, frontend, and backend divisions; defined sprint goals, delegated responsibilities, and ensured project milestones were met on schedule.
  - Oversaw architecture design and integration of 5 key services: crop recommendation (21 crops), soil classification, YOLO-based weed detection, LangChain-powered analytics, and a multimodal farming Q&A system.
  - Facilitated collaboration between technical teams and stakeholders, optimizing team workflows and ensuring seamless deployment of FastAPI-based mobile-first endpoints ( 500 queries/day) achieved **92% accuracy**.
- **Hospital ICU Network Attack Predictor**  Python, ANN, FastAPI, Streamlit, IoT, Network Security, Git Oct 2024
  - Directed a 5-member team through the full project lifecycle—from problem scoping and data sourcing to deployment—ensuring technical alignment and timely delivery.
  - Orchestrated integration of ANN-based intrusion detection for IoT healthcare networks, balancing model performance and real-time response (achieved **97.6% precision**, **<50ms latency**).
  - Oversaw development of modular FastAPI services and a Streamlit-based interface for seamless testing and visualization.
  - Project recognized within the ML community: **~1.5k+ notebook views** and **64+ private notebooks** replicating or extending the solution.
- **Project Sanket (Sign Detection)**  Python, LSTM, MediaPipe, NumPy, Streamlit, Git Jul 2025
  - Coordinated a 5-member team to build a lightweight sign language detection system using custom LSTM architectures and MediaPipe-based pose tracking.
  - Collected and pre-processed a data set of ~900 frames per symbol (30s at 30 FPS) for 5+ unique signs, using joint landmarks from the hand, face and body.
  - Achieved an average **85.2% classification accuracy** on validation data, demonstrating robustness across multiple users and lighting conditions.

## Leadership & Co-curriculars

- **Coordinator, Tamil Club – VIT Bhopal** 2023 – 2025
  - Spearheaded cultural initiatives and team management for Tamil Club, overseeing event planning, performances, and inter-club coordination.
  - Led the Pongal celebrations in 2024 and 2025, managing logistics, cultural programs, and 200+ participants.
  - Directed the Tamil Club dance team for Advitiya 2024, choreographing and managing stage presence for a major inter-college cultural event.
  - Served as Dance Coordinator for Tamil Club's 2023 flash mob, coordinating performers and rehearsal schedules under tight deadlines.
- **Hostel Student In-charge & Mess Committee Member** 2023 – 2024
  - Acted as the liaison between hostel residents and administration, addressing grievances and improving hostel life.
  - Collaborated on mess planning, quality audits, and feedback systems to improve student dining experience.