# Vedant Singh

singhvineetvedant@gmail.com | +91-887300 $\overline{1}000$  | LinkedIn | GitHub Ghaziabad, UP Bangalore

# Summary

I am a detail-oriented and result-driven Computer Science graduate with a strong foundation in application development, object-oriented programming, and cloud-based technical solutioning. Through multiple internships across AI surveillance, high-performance computing, and industrial automation, I've developed the ability to design, build, and test scalable software systems while working closely with cross-functional teams and diverse stakeholders.

My experience includes preparing technical specifications, documenting complex processes, and contributing directly to client-facing engagements. I've supported solution delivery and provided strategic input during presentations and project planning meetings with internal and external collaborators.

With a strong analytical mindset, adaptability, and a commitment to continuous learning, I bring value to teams that thrive on innovation, collaboration, and delivering practical, real-world technology solutions. I am open to relocation and travel, and I welcome opportunities where I can grow technically while contributing meaningfully to impactful projects.

### **Key Skills**

Languages and Databases: Python, SQL, C++, Git, AWS, OOPS, Java (Basic), GitHub Visualization Tools: OpenCV, sqlite3, Tkinter, TensorFlow, PyTorch, gTTS, Pandas, Numpy Other Skills: Python development, SQL database, team management, leadership qualities

# Internship Experience

# **Altair Engineering** – HPC Intern Bangalore

Apr 2025 - Jun 2025

- Worked with clients like **Boeing Co.**, **HAL**, **ISRO**, **Porsche**, **Tata Motors** to deliver customized HPC solutions using AWS and OCI.
- Acted as client-facing technical liaison to analyze needs and propose automation strategies, improving infrastructure scalability and reducing deployment time by 37%.
- Conducted root-cause analysis of system issues across Linux/Windows, resulting in a 60% faster response cycle.

**Proeffico Solutions Pvt. Ltd.** – Project Lead Intern (AI & Compliance) *Noida* 

Oct 2024 – Jan 2025

- Led project teams on AI surveillance; co-pitched technical solutions to enterprise clients alongside the CEO.
- Proposed architecture and compliance-aligned customizations using YOLOv8 and pose estimation to increase client adoption and system accuracy.
- Developed AI-powered monitoring systems integrated with IoT devices, real-time alerts, and barcode scanners.

# ${\bf TATA~Motors} - {\bf Software~Engineer~Intern} \\ {\it Jamshedpur}$

Feb 2024 – May 2024

- Designed real-time safety systems using Python, CNN, and YOLO for production line automation.
- Researched AI use in ADAS and robotics; presented neural network solutions for next-gen vehicles.

Centre for Railway Information Systems – Software Engineer Intern Delhi

Jun 2023 – Jul 2023

- Contributed to PRS/UTS backend using SAP and MySQL, optimizing passenger ticketing workflows.
- Delivered technical documentation and participated in troubleshooting live ticketing infrastructure.

### Selected Projects

# Accessible Ticketing System for Vision Impairment

Built a Python + SQLite app with Braille integration and ticket generation logic for the visually impaired.

#### Text-to-Audio Converter

Used gTTS and Tkinter to build a PDF-based audiobook generator for enhanced content accessibility.

#### Object Tracking System

Developed Arduino-C++ powered tracking module using ultrasonic sensors and servo alignment.

#### Parallel Programming with OpenMP

Optimized C++ algorithms using OpenMP for faster matrix computations and data handling.

#### My.Prompt - AI Prompt Engineering Toolkit

Developed a modular prompt engineering framework in Python to streamline and automate AI-driven tasks. Designed prompt chaining, response parsing, and workflow scripting features to enhance usability and scalability across generative AI applications. Focused on reusability and developer-centric deployment strategies.

#### Education

#### B.Tech - Computer Science and Engineering

SRM Institute of Science and Technology CGPA: 8.21

Sep 2021 - Jun 2025

CBSE Class 12 (PCM) – Bharti Public School

Jul 2021

#### Certifications

- Cloud Computing & Distributed Systems
  - NPTEL
- Introduction to Cybersecurity
  - Cisco
- Data Analytics
  - IBM (Coursera)
- Machine Learning I Columbia University – Issued via Columbia Digital Credentials Platform
- NCC 'C' Certificate Leadership and Discipline , Ranked as Senior Under Officer (suo) , ARMY wing