

# Komal Saraf

Kolkata 700048 | +91 7439766518  
Email - [komalsaraf04@gmail.com](mailto:komalsaraf04@gmail.com)

---

## EDUCATION:

**Bachelor of Technology (B.Tech.) - Computer Science**  
*Vellore Institute of Technology (B.TECH CSE Core)*  
*Cumulative GPA - 7.47*

Sep 2022 - June 2026

**High School Diploma**  
*Mahadevi Birla Shishu Vihar*  
*ISC – 74%*

*Welland Goulsmit School*  
*ICSC – 86%*

Apr 2019 - Jun 2022

---

## SKILLS:

- **Languages:** Python, Java, C++, SQL.
- **Core Competencies:** Problem-solving, Data Structures and Algorithms, Object-oriented Programming, Artificial Intelligence, Machine learning (TensorFlow, PyTorch, Scikit, Matplotlib, Pandas), CI/CD Pipelines, Model Training & Optimization, Data Engineering, Data Visualization, Data Analytics, Prompt Engineering.
- **Tools:** MS Office(Word, Excel, PowerPoint), Tableau, PowerBI, MySQL
- **Soft skills:** Analytic skills, verbal and written communication, collaborative, leadership.

---

## PROJECTS:

- **Sign language Detection** (Machine Learning) July 2025-Sept 2025
  - Designed a system for real-time sign-to-text conversion, enhancing communication accessibility for the hearing-impaired.
  - Achieved 90%+ accuracy in gesture recognition using CNN-based models, YOLO for object detection, and OpenCV for pose estimation.
  - Deployed optimized ML models with TensorFlow Lite for on-device inference, enabling low-latency with integrated live camera feed processing and dynamic UI rendering within the Android framework.
  - Skills Used: TensorFlow Lite, YOLO, OpenCV, CNN, Android Studio, Java, ML Model Optimization
- **Heart disease Detection** (Machine Learning) Jan 2025- May 2025
  - Developed a healthcare system designed for early heart disease detection, providing predictions based on a patient's physical and medical characteristics.
  - Integrated and optimized various machine learning algorithms (e.g., Logistic Regression, Support Vector Machines, Random Forest) to enhance prediction accuracy and efficiency.
  - Attained a prediction accuracy of more than 85% by analyzing 1000+ dataset entries, demonstrating robust performance in identifying potential heart disease cases from input data.
  - Skills Used: Python, Scikit-learn, Pandas, NumPy, Matplotlib, Jupyter Notebook, ML Model Evaluation.
- **Desktop Assistant** Aug 2024 – Oct 2024
  - Created a highly responsive, voice-enabled Desktop Assistant automating daily tasks, leading to an estimated 20% increase in user productivity achieved by seamlessly integrating Python libraries (SpeechRecognition, pyttsx3) for voice-to-text conversion and developing a GUI (Tkinter) with interactive modules for streamlined control over assistant functionalities.

---

## CO-CURRICULARS:

- C++ gold badge , Hackerrank
- Python gold badge , Hackerrank
- Completed 15 Skill badges in Google Cloud Skill Boost.
- Supervised machine learning, Stanford University, Coursera
- A certified course on Generative AI by IBM.
- Member, AI Club, VIT Bhopal 2022 – Coordinated and organized multiple events, workshops, and functions within the AI Club, contributing to community building, knowledge sharing, and enhancing student participation in Artificial Intelligence initiatives