Komal Saraf

Kolkata ,700048 | +91 7439766518
Email- komalsaraf04@gmail.com

SKILLS:

- Python, Java, C++, HTML, CSS, JavaScript, Reat.js, Node.js, MySQL, RDBMS.
- Problem-solving, Data Structure and Algorithms, Object-oriented Programming, Machine learning algorithms (TensorFlow, PyTorch, NumPy, Pandas) Web development.

EDUCATION:

Bachelor of Technology (B.Tech.) - Computer Science *Sep 2022 - June 2026*
VIT Bhopal University (B.TECH CSE Core)
Cumulative GPA - 7.53

PROJECTS:

- **iMovies** (Fullstack) *Jan 2025- April 2025*
  - Developed "iMovies," an online movie ticket booking system featuring secure user login, movie Browse, showtime selection, interactive seat mapping, and secure booking completion.
  - Engineered a dynamic React.js frontend supporting over 5 distinct page views (e.g., movie listing, detail, seat selection, checkout, user profile) for an intuitive user experience.
  - Tech stack used- MongoDB , Express.js ,React.js, Node.js

- **Sign language Detection** (Machine Learning) *July 2024- Dec 2024*
  - Developed a Sign Language Detection Android application to bridge communication gaps for the hearing-impaired, enabling real-time sign-to-text conversion for improved accessibility.
  - Achieved over 90% accuracy in sign interpretation by leveraging machine learning algorithms such as CNNs and OpenCV for pose estimation and libraries like TensorFlow Lite, YOLO, OpenCV.
  - Engineered the core functionalities for mobile deployment, including real-time camera input processing, on-device machine learning inference, and dynamic display of converted text within the Android framework.

- **Heart disease Detection** (Machine Learning) *Feb 2024 – May 2024*
  - Developed a healthcare website 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.
  - Achieved a prediction accuracy of more than 85%, demonstrating robust performance in identifying potential heart disease cases from input data.

- **Desktop Assistant** *Oct 2023-Dec 2023*
  - Engineered a highly responsive, voice-enabled Desktop Assistant, automating over 15 distinct daily tasks to deliver an estimated 20% increase in user productivity through hands-free operation.
  - Seamlessly integrated and optimized core Python libraries, including SpeechRecognition and pyttsx3, achieving consistent sub-second latency for voice-to-text conversion and natural language responses.
  - Developed a visually intuitive graphical user interface (GUI) using Tkinter, featuring 4 critical interactive modules that provide real-time feedback and streamlined control over assistant functionalities.

CO-CURRICULARS:

- Generative AI, IBM
- Supervised Machine Learning, Stanford University - Coursera
- C++ gold badge , Hackerrank.
- Member of Google Cloud Career Launchpad Program-APAC 2024.
- Member of Computer Society of India.