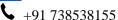# Omkar Kanse

✉ omkarkanse2004@gmail.com | 21112101@pvgcoet.ac.in

in https://www.linkedin.com/in/omkar-kanse-56a5832b | 📞 +91 7385381551

PERSONAL DETAILS

Birth Date: 07/02/2004
Father Name: Kanse Ishwar Pandharinath
Permanent Address: Shrigonda Dist.Ahmednagar 413701

EDUCATION

BE E&TC
Pune Vidhyarthi Griha's College of Engineering and Technology ,Pune.
SPPU,formerly University of Pune.
Persuing, current GPA till 7th semester is 8.10
June 2025 | Pune, India

HSC
Shri Chhatrapati Shivaji Mahavidyalaya
Passed with 93.17%
June 2021 | Shrigonda,India

SSC
Mahadaji Shinde Vidyalaya Passed with 87.40%
June 2019 | Shrigonda,India

SKILLS

- ❖ **Cloud Computing (AWS):** Proficient in leveraging AWS services such as EC2, S3, Load Balancing,AutoScaling ,RDS, CloudWatch and more to develop and manage cloud-based applications.
- ❖ **Linux OS:** Comfortable with basic Linux commands for file handling, user management, and performing networking tasks.
- ❖ **Web Server Management:** I have hands-on experience in configuring and managing web servers like Nginx and Apache. I've deployed various websites, portfolios, and applications using these web servers.
- ❖ **Programming (Python, C++):** Strong in problem solving, data structures and algorithms (DSA), and object-oriented programming (OOP) in C++.
- ❖ **Database Management (MySQL, SQL):** Proficient in working with relational databases, optimizing queries, and handling data efficiently.
- ❖ **Version Control (Git/GitHub):** Experienced in using Git and GitHub for version control and collaborating on projects.
- ❖ **Microcontroller Programming:** Familiar with microcontrollers (STM32, 8051, PIC, ESP32) and programming/uploading code to hardware.
- ❖ **Electronic Components, Digital Electronics, and DSP:** Knowledgeable in working with various electronic components, digital electronics concepts, and applying DSP techniques.
- ❖ **PCB Design:** Hands-on experience designing and creating custom PCBs for embedded projects.

ACHIEVEMENTS

- ❖ Achieved 5 stars in C++ and SQL, and 4 stars in Problem Solving on the HackerRank platform.
- ❖ Certificate of Cloud Computing using AWS.
- ❖ HakerRank Problem solving certificates.
- ❖ IIT Bombey Internship certificate.
- ❖ 90.13% in MHT-CET.
- ❖ MATLAB course completion certificates.

PROJECTS

SMART TRAFFIC LIGHT CONTROL SYSTEM [Jan 2024 - May 2024]
I worked on creating a smart traffic light control system that uses the YOLO (You Only Look Once) algorithm for real-time vehicle detection. My role involved implementing YOLO to count the number of vehicles and adjusting the traffic lights based on the traffic density. I also integrated the system with digital image processing techniques to improve traffic flow and reduce congestion. By using YOLO, the system could detect vehicles more quickly and efficiently, leading to better traffic management. The goal was to show how AI can make cities smarter by improving traffic conditions.

GUIDANCE SYSTEM FOR BLIND PEOPLE (STICK) [Oct 2023 - Jan 2024]
I developed a smart stick using a PIC18F2550 microcontroller, ultrasonic sensors (HCSR04), and a buzzer to help blind people detect obstacles around them. My role was to design the circuit, write the code, and test the system to make sure it accurately detects objects in front, left, and right, then alerts the user through the buzzer. The goal was to build something low-cost and easy to use, which could help blind individuals move around safely in real time.

AUDIO TRANSMISSION THROUGH LIGHT (LI-FI) [March 2023]
I worked on a project where we transmitted audio signals using Li-Fi technology, which uses light to send data faster than traditional Wi-Fi. My role was to design the system, handle the transmission process, and perform tests to ensure that the data transfer was stable and fast. I also led the underwater tests, showing how Li-Fi could work in environments where Wi-Fi doesn't. The goal was to explore how light-based communication can be an alternative for faster and more secure data transfer.

MAKING SCIENTIFIC CALCULATOR & BANKING MANAGEMENT SYSTEM USING C++ PROGRAMMING LANGUAGE [December 2022]

EXPERIENCE

Digital Signal Processing Intern
IIT Bombay
[Oct 2023 – Mar 2024]

- Developed a real-time smart traffic light control system utilizing the YOLO algorithm to detect vehicles and optimize traffic flow.
- Reduced congestion by dynamically adjusting traffic signals based on real-time data.
- Gained hands-on experience in digital signal processing and embedded systems development.

COURSES

COMPLETED CLOUD COMPUTING COURSE THROUGH AWS [Oct 2024]
I completed an AWS Cloud Computing course, where I gained hands-on experience with services like EC2, S3 ,RDS and more. I learned how to deploy web applications, manage cloud resources, and implement automation using Lambda. This course equipped me with practical skills in designing and optimizing cloud-based solutions.

HAKERRANK C++ PROBLEM SOLVING COURSE [June 2024]
I completed the HackerRank C++ problem-solving course, where I learned C++ concepts and tackled many problems focused on data structures and algorithms. This course helped me strengthen my coding and problem-solving abilities, earning a 5-star rating for my performance.

STRENGTH & HOBBIES

- FOCUSED
- LOYAL & TRUST WORTHY
- FAST LEARNER
- PLAYING CHESS
- CODING PRACTICE
- SOLVING PUZZLES