# **Omkar Kanse**

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# 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**

- ❖ AWS Expertise: Hands-on experience with AWS compute services (EC2, Lambda), storage (S3, EBS), databases (RDS, DynamoDB), and networking (VPC, Subnets, Security Groups, NACLs, Site-to-Site VPN). Skilled in monitoring (CloudWatch), security (IAM, Security Groups, NACLs), content delivery (CloudFront), load balancing (ELB), and Auto Scaling. Expertise in managing infrastructure using AWS tools to build scalable, secure, and efficient cloud environments.
- Programming (C++,Python): Strong in problem solving, data structures and algorithms (DSA), and object-oriented programming (OOP) in C++.
- 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.
- 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 PCB's for embedded projects.

# **PROJECTS**

# SITE-TO-SITE VPN TUNNEL BETWEEN SINGAPORE AND MUMBAI REGION [JAN 2025]

I set up a site-to-site VPN tunnel between AWS Singapore and Mumbai regions. Created the Customer Gateway and Virtual Private Gateway in Mumbai, along with VPCs, subnets, route tables, and internet gateways in both regions. Configured StrongSwan on the instance in Singapore, allowing me to successfully ping the Mumbai instance through private IP. Established a secure tunnel for seamless communication between both regions.

# AWS-HOSTED PERSONAL PORTFOLIO WEBSITE [Dec 2024]

Developed and deployed a personal portfolio website on AWS, using EC2 for hosting and CloudFront for optimized content delivery and enhanced security with HTTPS. Leveraged AWS services for scalability, performance, and secure access to showcase my cloud expertise.

#### 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.

# **EXPERIENCE**

# **AWS Cloud Intern**

# F13 Technologies

# Jan 2025 – Present | Delhi, India | Remote

Currently completing a 3-month internship, applying my AWS cloud computing knowledge in a real-world environment. I am working with AWS services like EC2, Lambda, S3, and RDS, while enhancing my skills in networking (VPC, security groups), monitoring (CloudWatch), and automation. I am actively contributing to cloud infrastructure projects and gaining hands-on experience with AWS tools and best practices in a collaborative team.

This internship is also helping me build skills to achieve 6 AWS accreditations, and I will receive 6 AWS certifications upon completion, provided by AWS itself.

#### **Trainee AWS Cloud Engineer**

# Cravita Technologies India Pvt. Ltd.

# Oct 2024 – Jan 2025 | Pune, Maharashtra | On-site

Worked on designing and deploying scalable cloud solutions using AWS services (EC2, Lambda, S3, VPC, CloudFront). Gained hands-on experience in AWS security (IAM), monitoring (CloudWatch), and managing Linux-based web servers (Nginx, Apache). Contributed to building, troubleshooting, optimizing, and scaling cloud infrastructure, strengthening my foundation for a DevOps career

# **Project-based Intern**

#### IIT Bombay | Oct 2023 - Mar 2024

During this period, I worked on developing a smart traffic light control system, leveraging the YOLO algorithm to detect vehicles and optimize traffic flow in real-time. I implemented a solution that dynamically adjusted traffic signals based on real-time data to reduce congestion. This project allowed me to gain practical experience in signal processing, algorithm implementation, and embedded systems, while enhancing my problem-solving and system optimization skills.

# **ACHIEVEMENTS**

- ❖ Achieved 5 stars in C++ and 4 stars in Problem Solving on the HackerRank platform.
- Certificate of Cloud Computing using AWS.
- HackerRank Problem solving certificates.
- IIT Bombay Internship certificate.
- MATLAB course completion certificates.

# STRENGTH & HOBBIES

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