

# MADHAV SUTTRAWAY

Pune, Maharashtra

(+91) 7385758442

16 Nov '98

suttrawaymadhav@gmail.com

LinkedIn

## OBJECTIVE

Actively contributes to group projects and motivates members to achieve common targets. Has the ability to gather, organize, analyze and interpret a wide range of information. Has a keen eye for detail, with a tendency to go into the depth of a matter. Seeks a flexible and innovative environment that inspires creativity and encourages thinking outside the box to achieve a fruitful output.

## EDUCATION

|  |          |
|--|----------|
| B.Tech, Mechanical                                     | Jan 2023 |
| N K Orchid College of Engineering & Technology,Solapur | 8.06     |
| Pune Board   | 2017     |
| H.D Jr. College Arts & Science, Solapur                | 47.08%   |
| Pune Board   | 2015     |
| Haribhai Deokaran High School, Solapur                 | 48.40%   |

## WORK EXPERIENCE

|  |                     |
|--|---------------------|
| IOT developer , kloudq technologies pvt ltd, Pune    | Jan 2023 – May 2023 |
| Embedded Testing Engineer , Coulomb Li-Tech., Mumbai | Jun 2023 – Nov 2023 |
| RnD Engineer., Yellow Matrix, Pune                   | Dec 2023 – Present  |

## PROJECTS

|  |                     |
|--|---------------------|
| Self Balancing Vehicle (segway)  | May 2021 – Nov 2021 |
| The Vehicle is kept balanced through the correction provided by the wheels which goes against the direction of fall. The current orientation of the Vehicle is monitored by the MPU6050 sensor. The orientation is constantly compared to a desired orientation through a PID loop. The Vehicle is steady when the loop output is zero   |                     |
| Developed a project  |                     |
| CAN Signal Development Board(Automotive)   | May 2024 – May 2024 |
| This project involves the development of a CAN (Controller Area Network) signal generation board designed for testing and simulating actuator signals. The board integrates switches and potentiometers to produce and adjust CAN signals, allowing users to emulate various actuator responses and network conditions. It features a CAN bus interface for seamless communication with other CAN devices. This tool is essential for testing CAN networks, debugging communication protocols, and training on actuator simulations. The development board enables real-time signal generation and monitoring, streamlining the development and validation of CAN-based systems. |                     |
| Real-Time Drowsiness Detection and CAN Signal Alert System Using Computer Vision and ESP32(Automotive)   | Apr 2024 – Apr 2024 |
| This project is a real-time drowsiness detection system using computer vision and deep learning, designed to enhance safety by monitoring the user's eye movements. The system captures video from a webcam and analyzes the Eye Aspect Ratio (EAR) to detect if the user's eyes are closed, indicating drowsiness. Upon detection, the system sends alerts to an ESP32 server, which then generates a CAN signal using a TJA1050 CAN transceiver module. The program employs OpenCV for video capture, Dlib for facial landmark detection, and communicates with the ESP32 to trigger CAN signals, ensuring effective fatigue monitoring and prevention                         |                     |
| Real-Time Face Attendance System(AI,ML)  | Jun 2024 – Jan 2024 |
| This project implements a real-time face attendance system using computer vision and cloud services. The system captures live video from a webcam, detects faces, and matches them against a pre-loaded database using facial recognition. When a match is found, it retrieves and updates student data from Firebase Realtime Database and Cloud Storage. The system displays the student's information, including their attendance count and photo, on a background image. The application utilizes asynchronous programming to handle Firebase interactions efficiently, ensuring smooth performance and accurate attendance recording.                                       |                     |
| And many more projects based on arduino and ESP32 (IOT)  |                     |

AWARDS

|  |             |
|--|-------------|
| <b>kpit sparkle 2023 , kpit technologies</b><br>Our project was selected in KPIT sparkle 2023 as a finalist. | 19 Mar 2023 |
| <b>kpit sparkle 2022, kpit sparkle</b><br>Selected in Top 100 team   | 8 Feb 2021  |
| <b>Project of the year In 2022, Dassault Sysytem</b><br>3rd rank in sustainability                           | 1 Apr 2022  |
| <b>Internship, kloudq technologies pvt ltd</b><br>Role- IOT developer  | 20 Apr 2023 |

CERTIFICATIONS

|   |            |
|---|------------|
| <b>Certificate in PC Maintenance</b><br>All India Council For Professional Training & Research Pvt. Ltd.<br>certificate in PC Maintenance | 4 Sep 2012 |
|---|------------|

SKILLS

|   |  |
|---|--|
| <b>CAN-2.0B\CAN-DF\j1939</b><br>Intermediate  | <b>AI &amp; ML</b><br>Intermediate       |
| <b>Protocols I2C\UART\SPI</b><br>Intermediate | <b>PCB design</b><br>Intermediate        |
| <b>ESP32 Module Series</b><br>Expert          | <b>STMicrocontroller</b><br>Intermediate |
| <b>C++</b><br>Beginner                        | <b>Robotics And IOT</b><br>Intermediate  |
| <b>Solidworks</b><br>Expert                   |  |

PERSONAL SKILLS

- Possesses great analytical and problem-solving skills. Ability to think rationally and thoughtfully.
- Good at observing subtle details and can take decisions effectively.
- Outside the box thinker, can come up with creative solutions that can be a real asset in any role.
- A team player, good at working collaboratively with people in order to achieve a common goal.

EXTRA-CURRICULAR ACTIVITIES

- Member of Mechanical Engineering Students Association (MESA) in the year 2021.

LANGUAGES

|                                |                          |
|--------------------------------|--------------------------|
| <b>English</b><br>Intermediate | <b>Hindi</b><br>Advanced |
| <b>Marathi</b><br>Advanced     |                          |

HOBBIES

|           |         |
|-----------|---------|
| Traveling | Cricket |
|-----------|---------|

**Declaration:**

I hereby confirm that all the details furnished above are authentic and accurate to the best of my belief.

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