



Sinhgad Institutes

# SAGAR ASHOK MATE

B.E. - Electronics & Telecommunication Engineering

Ph: +91-8261994536

Email: sagarmate.nbnstic.entc@gmail.com

Pune, Maharashtra, India - 411024

## BRIEF SUMMARY

Ambitious and adaptable graduate with a Bachelor's degree. Possessing strong interpersonal skills and a passion for Electronics and Hardware Industry, I am eager to kickstart my career and contribute positively to a forward-thinking organisation.

## KEY EXPERTISE

Circuit Design, Microcontroller Programming, Embedded System, IOT Integration, Power Electronics, Cellular Networks

## EDUCATION

**NBN Sinhgad School Of Engineering, Pune** 2021 - 2025

B.E. - Electronics & Telecommunication Engineering | CGPA: 8.04 / 10

**Dnyanaganga Junior College Pune, Pune** 2020

12<sup>th</sup> | MSBSHSE | Percentage: 70.92 / 100

**L. Bandoji Khandoji Chavan High School, Pune** 2018

10<sup>th</sup> | MSBSHSE | Percentage: 90.60 / 100

## INTERNSHIPS

**Fadak Technologies pvt. ltd** | Consumer Electronics / Appliances 20 Jan, 2024 - 20 Apr, 2024

Trainee Engineer

Assisted in the training and evaluation of deep learning models for object detection and classification. Worked with large datasets, performing data augmentation and preprocessing. Collaborated with cross-functional teams to integrate vision models into product pipelines.

Utilized Python, OpenCV, TensorFlow, and PyTorch in various projects.

## PROJECTS

### Automatic Night Lamp

Team Size: 3

**Key Skills:** Circuit Design, Component Selection, Hardware Implementation,

It detects itself whether there is need for light or not. When darkness rises to a certain value then automatically light is switched ON and when there is other source of light i.e. day time, the light gets OFF

### Gas Leakage Detection System

Team Size: 2

**Key Skills:** Sensor Interfacing, microcontroller programming, System Integration

This project involve Designing of effective gas leakage detection system using 8051 microcontroller, interfacing with sensors to detect gas to alerting user through audible alarm.

### AI driven crop diseases prediction management system

**Key Skills:** Python, Automation, System Integration, Electronics and Circuit Design, IOT Integration

Developed an AI-based system leveraging machine learning algorithms and data analytics to predict and manage crop diseases in agricultural fields. The system analyzes environmental factors, historical disease data, and real-time sensor inputs to detect early signs of disease outbreaks, recommend preventive measures, and optimize crop management strategies. Achieved improved crop yield and reduced losses by enabling proactive disease control and timely intervention.

### Automatic Number plate Recognition system using Raspberry pi.

Team Size: 2

**Key Skills:** Python, Computer Vision, CNN, Machine Learning

The system uses a camera along with LCD display circuit interfaced to a Raspberry pi. The system constantly processes incoming camera footage to detect any trace of number plates. On sensing a number plate in front of the camera, it processes the camera input, extracts the number plate part from the image.

## FX Weather - A weather application using JavaFX for user interface.

**Team Size:** 3

**Key Skills:** Java, API Integration, Data Visualization, Error Handling

FX weather empowers users to make informed decisions based on accurate weather information presented in a clear and accessible manner. Whether planning daily activities, travel itineraries, or outdoor events, the application ensures users are equipped with up-to meteorological insights.

## PUBLICATIONS / RESEARCH / WHITE PAPERS

### Approach To Enhance Video Surveillance Using Cognitive Object Detection Techniques

**Mentor:** Dr. M. M. Jadhav | **No. of Authors:** 2

Object detection plays a crucial role in enhancing video surveillance systems, particularly in monitoring vehicle number plates during the era of rapid lateral development. However, this practice faces significant challenges, primarily stemming from varying visibility due to light conditions, environmental factors, weather fluctuations, and the critical demand for accuracy over varying distances. Typically, detected number plate images are stored to build a comprehensive database, aimed at preventing multiple entries and improving operational efficiency. Concurrently, a user-friendly website has been developed to enhance user interaction and access.

## ASSESSMENTS / CERTIFICATIONS

### Java,OS,DBMS Certification

This certification validates your ability to develop java applications. While it primarily focuses on java programming of java is beneficial for many aspects of software development, including OS- related applications.

### C/Cpp and Data structures

Certifications provide a formal validation of your proficiency in C/C++ programming languages. This is especially valuable when applying for jobs or seeking promotions, as it demonstrates to employers that you have the necessary skills and knowledge.

## SEMINARS / TRAININGS / WORKSHOPS

### Internet of Things (IOT) Institute Name: NBN Sinhgad School Of Engineering, Pune

IOT is a typically embedded with technology such as a sensors and software and can include mechanical and digital machine

### Data Science

**Institute Name:** NBN Sinhgad School Of Engineering, Pune

Gain a foundational understanding of key concepts, methodologies, and techniques used in data science, such as data cleaning, exploratory data analysis, machine learning, and data visualization.

## PERSONAL DETAILS

**Gender:** Male

**Date of Birth:** 06 Sep, 2002

**Current Address:** khadakwasla gaon, near main bustop pune  
-411024, Pune, Maharastra, India - 411024

**Phone Number:** +91-8261994536

**Email:** sagarmate.nbnstic.entc@gmail.com