

# Jaykumar Girase

Shirpur

| Email

| +91 8010582428

| Linkdin

| Portfolio

| Github

## Career Objective

Electrical Engineering student with expertise in automation, IoT, and renewable energy. Skilled in programming, open-source contributions, and data structures algorithms. Passionate about software development, smart grid optimization, and solving real-world challenges through technology..

## Education

**R C Patel Institute of Technology, Shirpur, Maharashtra** , Electrical Engineering

Nov 2022 – Present

- GPA: 6.00/10.0

**R C Patel Junior College, Shirpur, Maharashtra**, HSC

June 2020 - June 2022

- Percentage: 87.40

**R C Patel Secondary and Higher Secondary School, Shirpur, Maharashtra** , SSC

2019 - 2020

- Percentage: 89.40

## Experience

**Stem Educator and Media Design Intern**, STEMSAGE TECHWORLD LLP, Shirpur

May 2024 – Aug 2024

- Led Arduino and electronics workshops, developing course materials and project guide s.s
- Conducted hands-on training sessions on robotics, IoT, and coding, engaging students in interactive STEM learning.

## Publications

**Integration of Solar and Wind Tracking System**

December 2024

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## Projects

**Automatic Plant Water Irrigation System**

Jun 2022

- Developed an automated irrigation system using soil moisture sensors and a microcontroller.
- Programmed the system to activate water pumps when soil moisture levels dropped below a predefined threshold.

**Integration of Solar and Wind Tracking System**

Dec 2024

- Designed a hybrid renewable energy system to track solar and wind energy sources for maximum efficiency
- Utilized microcontrollers and sensors to dynamically adjust the position of solar panels and wind turbines based on environmental conditions

**Energy Consumption Forecasting for Smart Grids (Major Project)**

ongoing

- Developed a predictive model to forecast energy demand in smart grids using machine learning.
- Integrated real-time data analysis to optimize energy distribution and reduce wastage.

## Technologies

**Programing Languages:** C++, C, Java, python, vue.js, react.js, jupiter notebook.

**Devlopment Tools:** Arduino IDE, Visual Studio Code, Photoshop,Filmora, PLC.

**Hardware Tools:** Soldering, DMM , IOT.

## Achievements

**Toy Making Competition at RCPIT**

Feb 2025

- 1st Place.

**German Language Proficiency:**

Feb 2025

- Successfully cleared the Goethe-Zertifikat A1 (Institute Level).

**Robo Racing at COEM, Jalgaon**

Feb 2024

- 1st Runner Up