

# Jaykumar Girase

Shirpur | jaykumargirase@gmail.com | +91 8010582428 | linkedin.com/in/JaykumarGirase | github.com/jaykumargirase

## 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

|   |                       |
|---|-----------------------|
| <b>R C Patel Institute of Technology, Shirpur, Maharashtra</b> , Electrical Engineering | Nov 2022 – Present    |
| • GPA: 5.50/10.0  |                       |
| <b>R C Patel Junior College, Shirpur, Maharashtra</b> , HSC                             | June 2020 - June 2022 |
| • Percentage: 87.40   |                       |
| <b>R C Patel Secondary and Higher Secondary School, Shirpur, Maharashtra</b> , SSC      | 2019 - 2020           |
| • Percentage: 89.40   |                       |

## Experience

|  |                     |
|--|---------------------|
| <b>Stem Educator and Media Design Intern</b> , 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

|  |               |
|--|---------------|
| <b>Integration of Solar and Wind Tracking System</b> | December 2024 |
| Jaykumar Girase - 1V5ISSUE11/IJRPR35626              |               |

## Projects

|  |          |
|--|----------|
| <b>Automatic Plant Water Irrigation System</b>   | 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.                                |          |
| <b>Integration of Solar and Wind Tracking System</b>   | 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 |          |
| <b>Energy Consumption Forecasting for Smart Grids (Major Project)</b>  | 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

|  |          |
|--|----------|
| <b>Toy Making Competition at RCPIT</b>                             | Feb 2025 |
| • 1st Place.   |          |
| <b>German Language Proficiency:</b>                                | Feb 2025 |
| • Successfully cleared the Goethe-Zertifikat A1 (Institute Level). |          |
| <b>Robo Racing at COEM, Jalgaon</b>                                | Feb 2024 |
| • 1st Runner Up  |          |