

# Jaykumar Girase

Shirpur

Email

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Linkdin

Portfolio

Github

## Career Objective

Passionate Electrical Engineering student with a strong foundation in automation, IoT, and machine learning, seeking to apply analytical, organizational, and technical skills as a Project/Program Management Intern. Enthusiastic about leveraging Python, data analytics, and cloud technologies to support efficient product delivery, streamline development lifecycles, and drive digital transformation within dynamic engineering environments.

## Education

### R C Patel Institute of Technology, Shirpur, Maharashtra

Nov 2022 – Present

- Bachelor of Technology in Electrical Engineering

## 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.

### Data Analyst Intern, Unified Mentor Pvt. Ltd., Gurugram Haryana

June 2025 – August 2025

- hands-on experience in data analysis processes, including data cleaning, transformation, and visualization using Excel and analytics tools.
- Supported the analytics team by generating insights from business data to assist in decision-making and reporting.

## Publications

### Integration of Solar and Wind Tracking System

December 2024

Jaykumar Girase - 1V5ISSUE11/IJRPR35626

## Projects

### FinSecure – AI-Based Financial Fraud Detection System (GitHub)

- Developed a full-stack FinTech platform using React, Node.js, Express, and MongoDB to detect and prevent fraudulent loan applications through secure authentication and real-time data monitoring.
- Built an interactive Admin Dashboard (Vite + shadcn UI) with JWT-based login, API integration, and analytics visualization for fraud trend analysis and risk assessment.

### Cybersecurity Suspicious Web Threat Interactions (GitHub)

- Developed a machine learning-based cybersecurity system using Random Forest, Isolation Forest, and Neural Networks to detect and classify suspicious web threats in real time through advanced data preprocessing and feature engineering.
- Built an interactive Streamlit dashboard integrated with SQL-based storage for live anomaly visualization, model performance analysis, and real-time cybersecurity threat monitoring.

### Motix-AI -Energy Consumption Forecasting for Smart Grids (Major Project) (GitHub)

ongoing

- Built a predictive maintenance system for industrial motors, achieving 93.13% accuracy in diagnosing critical faults. This solution can minimize downtime in critical infrastructure, enhancing operational efficiency and reducing maintenance costs.
- Simulated 6 critical fault conditions across 3 torque levels, generating 40K+ labeled data points via MATLAB/Simulink. Built scalable ML pipeline with 10+ engineered features, optimized using grid search and 5-fold cross-validation.

## Technologies

**Programming & Software:** HTML,CSS, JS , C, CPP, python, vue.js, react.js, jupiter notebook, MATLAB/Simulink.

**Development Tools:** Embedded Systems, Visual Studio Code, Kiro, MATLAB, IOT , PLC.

**Hardware Tools:** Soldering, DMM.

## Achievements

### Electric Toy Making Competition at RCPIT

Feb 2025

- 1st Place.

### German Language Proficiency

Feb 2025

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

### Open Gateway Hackathon (Nokia)

Oct 2025

- Top 4th Rank in the India.

### GlobaTech Hackthon,Pune

Feb 2024

- Globathon 7th Finalist