Komal Kumavat

Chalisgaon, Maharashtra
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Career Objective

Aspiring Electrical Engineer passionate about Embedded Systems, IoT, and Renewable Energy. Seeking a challenging role to apply my expertise in circuit design and automation to develop innovative solutions.

Skills

Technical Skills:

- Electrical circuit design, simulation (MATLAB, Simulink), Embedded Systems

- Microcontroller programming (Arduino, 8051), IoT applications

- Renewable energy systems: Solar and Wind integration

- Tools: Keil, Embedded C, Electrical CAD, Assembly, MS Office

- Java Programming

Soft Skills:

- Problem-Solving, Teamwork, Leadership, Communication

Education

R.C. Patel Institute of Technology, Shirpur   *Nov 2022 – June 2026*
B.Tech in Electrical Engineering (CGPA: 8.7)

Rashtriya Vidyalaya Jr. College, Chalisgaon   *June 2020 – June 2022*
HSC (70.17%)

Rashtriya Kanya School, Chalisgaon   *June 2019 – June 2020*
SSC (92.40%)

Research and Publications

Integration of Solar and Wind Tracking System, Nov 2024
Komal Kumavat, Jaykumar Girase, Yukta Badgujar, Kamini Rajput, Nikita Girase
ijrpr.com/IJRPR35626.pdf

Projects

Auto Human Night Light Control System

- Automated lighting using motion sensors, reducing energy wastage by 30%.

- Programmed microcontroller for adaptive real-time detection.

Automatic Plant Irrigation System

- Developed a microcontroller-based system optimizing water usage based on real-time soil moisture data.

- Reduced water wastage by 40% compared to manual irrigation.

Integration of Solar and Wind Tracking System

- Engineered a hybrid renewable system that increased energy output by 25%.

- Designed tracking mechanisms to optimize solar panel and wind turbine positions.

AI-Driven Fault Detection in Electrical Drives (Ongoing Major Project)

- Developing an AI-based system for predictive fault detection in electrical drives.

- Utilizing machine learning algorithms to enhance accuracy and efficiency.

Achievements

- First Rank in Electric Toy Making Competition, **Converges 2025-26**, RCPIT Shirpur (28 Feb 2025)

- Created a **Dancing and Musical Doll**, showcasing electrical automation and creativity.

- First Rank in Electro Toy Making Competition, **Converges 2024**, RCPIT Shirpur.

- Developed an innovative electrical toy using IoT and automation, outperforming 50+ teams.

Extracurricular Activities

- Completed Infosys Pragati Path to Future Program (Cohort-3), a three-month industry-focused program covering Software Development, Corporate Communication, and Leadership Skills.