PAYAL MAHURE

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A motivated and result-driven individual who can complete projects successfully and solve challenges effectively. Quickly adapts to new environments and embracing opportunities for growth. Works well both independently and as part of a team, contributing positively to shared goals. Committed to delivering quality work and making a meaningful impact through consistent effort and thoughtful solutions.

Profile Summary

- **Aspiring Web Developer** with a solid foundation in **Computer Science and Engineering (IoT)** and a results- driven approach to project delivery.
- **Skilled in front-end development using HTML, CSS, and JavaScript** with practical experience in building responsive interfaces and maintaining a personal portfolio website.
- **Hands-on experience with IoT development involving Raspberry Pi, ESP32, and sensor integration, including projects such as an AI-driven Wildlife Intrusion Detection System and a Smart Weather Monitoring System.**
- **Practical project experience** includes designing an AI-enabled Wildlife Intrusion Detection System to support farmers, and creating AI-assisted web applications such as a Form-Filling Assistant.
- **Knowledgeable with development tools and platforms such as Arduino IDE, IBM Cloud, ThingSpeak, Git/GitHub, VS Code, and Jupyter Notebook**, with a continuous learning approach to software and IoT technologies.
- **Certified in Artificial Intelligence (IBM SkillBuild), Java Programming (Udemy), Digital Marketing (Accenture) and ESP32 workshops**, reflecting commitment to strengthening technical and analytical capabilities.

Certifications

- **Artificial Intelligence (IBM SkillBuild)**
- **Java Programming (Udemy)**
- **Industry Connect Internship Program on Artificial Intillegence (U2U Systems)**
- **Digital Marketing (Accenture via future learn)**
- **Hands-on Workshop on ESP-32**

Skills

Category	Skills
Programming & Scripting	Java, C language, SQL, Python
Web Technologies	HTML5, CSS3, JavaScript, TypeScript, React.js
Database Management	MySQL, SQLite
Cloud Platforms & Services	IBM cloud, Thingspeak
Management	Project Management (Project initiation, Project planning, Project execution, Agile Project Management)
Soft Skills	Teamwork, Leadership, Adaptability, Time Management, Creative, Problem Solving
Platform	VS Code, Github, Git, Arduino IDE, Jupyter Notebook, Pycharm

Achievements

- **Developed an AI-driven Wildlife Intrusion Detection System** using Raspberry Pi, sensors, and automation to support farmers by improving crop protection and field monitoring.
- **Successfully completed key professional certifications** in Artificial Intelligence (IBM SkillBuild), Java Programming (Udemy),demonstrating continuous learning and skill development.

Education

Year	Degree / Qualification	Institution	CGPA/ Percentage
2022 – 2026	Bachelor of Engineering in Computer Science & Internet of Things	Yeshwantrao Chavan College of Engineering, Nagpur	7.31/10
2021 – 2022	Higher Secondary Certificate (HSC)	Mahatma Gandhi Jr. College, Wanadongri (MSBSHSE)	61.17 %
2019 – 2020	Secondary School Certificate (SSC)	L.D.B.School, Hingna (MSBSHSE)	80.40%

Project Details

CropSentinel – AI-Driven Wildlife Intrusion Detection & Repellent System

Technologies: Raspberry Pi 4B, Ultrasonic Sensor, Ultrasonic Transducer, Python, IoT, Automation, TinyML.

Details: Designed and developed a smart IoT-based system to detect wild animal intrusion in agricultural fields and automatically activate alert and noise free deterrent mechanisms. The project aims to support farmers by reducing crop damage and improving field security through real-time monitoring and automation.

Role: IoT Developer & Project Coordinator

- Designed the system architecture and selected required hardware components.
- Managed project planning, task distribution, and testing phases.
- Implement automated detterent activation using ultrasonic transducer.
- Gained hands-on experience in Raspberry Pi programming, sensor integration, and IoT-based problem solving.

SevaFill: AI-Powered Form Filling Assistant for Indian Citizen Services

Technologies: React, Typescript, Vite, Tailwind CSS, Web Speech API, NLP Concepts, Regex-Based Extraction, Client-Side AI Processing

Details: Designed and developed *SevaFill*, an intelligent AI-powered web application to simplify government form filling for Indian citizens. The system automatically extracts user details from documents and voice input with high accuracy, reducing manual effort and entry errors. It supports multilingual input, real-time validation, privacy-focused processing, and dynamic government form generation.

Role: Front-End Developer & AI Feature Integrator

- Developed responsive and multilingual user interface using React, TypeScript, and Tailwind CSS.d.
- Enhanced Implemented **AI-based document scanning, entity extraction (Aadhaar, PAN, DOB, address), and voice-to-form input** using OCR, NLP, regex, and Web Speech API.

Weather Advisory App – Smart Forecast & Farmer Advisory System

Technologies: React, Node.js, Express.js, MongoDB Atlas,OpenWeatherMap API

Details: Designed and developed a full-stack Weather Advisory web application that fetches real-time 5-day weather data based on city input and generates smart agricultural advisories using temperature, rainfall, humidity, and wind analysis, with interactive charts and downloadable PDF reports.

Role: Full-Stack Developer

- Developed responsive user interface using React to display forecasts, advisories, charts, and detailed weather data.
- Implemented backend REST APIs using Node.js and Express.js to fetch and process real-time weather data from OpenWeatherMap.
- Designed rule-based advisory logic for farmer-centric decision support.
- Integrated MongoDB Atlas to store and manage recent location search history.
- Enabled PDF report generation using jsPDF and html2canvas.

Personal Portfolio Website

Technologies: HTML, CSS, Github Pages

Details: Designed and developed a responsive personal portfolio website to showcase projects and skills.

Smart Weather Monitoring System using IoT

Technologies: ESP32, DHT11 Sensor, Thingspeak

Details : Monitored real-time temperature and humidity conditions using IoT sensors.Transmitted sensor data to a cloud dashboard for remote monitoring and visualization.