

VIPIN KUSHWAHA

Noida, Uttar Pradesh

[📞 +91-7081493932](tel:+91-7081493932) [✉ info@vipinkushwaha.in](mailto:info@vipinkushwaha.in) [📁 vipinkushwaha01](https://github.com/vipinkushwaha01) [🔄 CommitCraft](https://commitcraft.com) [🌐 vipinkushwaha.in](https://www.linkedin.com/in/vipinkushwaha.in)

FULL STACK DEVELOPER SPECIALIZING IN REAL-TIME INDUSTRIAL SYSTEMS, DASHBOARDS, AND ENTERPRISE APPLICATIONS USING REACT.JS, NODE.JS, NODE-RED, AND MYSQL. EXPERIENCED IN OEE MONITORING, 4M CHANGE MANAGEMENT, RBAC SECURITY, AND PRODUCTION AUTOMATION SYSTEMS.

PROFESSIONAL EXPERIENCE

Saral Technologies

May 2025 – Present

Software Engineer

On-site

- Designed and developed **real-time industrial monitoring systems** for machine performance, energy consumption, and preventive maintenance in production environments.
- Built and optimized scalable web applications using **React.js**, **JavaScript**, and **Tailwind CSS**, improving UI performance and user experience by **35%**.
- Integrated backend services using **Node-RED**, **MySQL**, and **REST APIs** for real-time data processing, automation, and reporting pipelines.
- Implemented **Role-Based Access Control (RBAC)**, authentication, and authorization mechanisms to secure admin panels and reduce unauthorized access by **40%**.
- Developed interactive **data visualization dashboards** (OEE, EMS, Maintenance) using **Chart.js** and **Highcharts** for decision-making and analytics.
- Automated reporting workflows, alerts, and data export systems, improving operational efficiency by **25%**.
- Worked with **real-time data streams**, **WebSocket/MQTT integrations**, and industrial APIs to enable live monitoring and system responsiveness.

Tutedude EdTech

Apr 2025 – Present

MERN Stack Mentor (Consultant)

Remote

- Mentored **100+** students on **MERN stack** fundamentals, project architecture, and scalable coding practices, improving **JavaScript**, **Node.js**, and **React** skills, leading to a **30%** improvement in project quality.
- Reviewed **100+** portfolios, providing tailored feedback and improving industry readiness for roles such as **Front-End Developer**, **Full Stack Developer**, and **Software Engineer**, resulting in a **20%** increase in industry-ready candidates.
- Collaborated with mentees on **10+** real-world **MERN** projects, enhancing hands-on development, boosting project completion rates by **40%**, and using tools like **Git**, **MongoDB**, and **Express**.
- Provided mentorship on resume building, **interview preparation**, and career roadmap planning, helping **75%** of mentees secure job offers within 3 months in roles such as **Full Stack Developer** and **Software Engineer**.

PS QuickIT Solution

Oct 2022 – July 2024

Software Engineer

On-Site

- Oversaw **APARs** and transfer postings for **DANICS**, **DANIPS**, **IAS**, and **IPS** officers, ensuring 99% accuracy and improving processing speed by 25%.
- Revamped the **SPARROW** application using the **JavaScript**, increasing system efficiency by 30% and reducing response time by 20%.
- Oversaw **IPRs** for Union Territory officers, maintaining 98% accuracy and integrating **MySql** and **Express.js** for **API management**.
 - * **SPARROW**: Refined and maintained a comprehensive application for managing APARS and IPRS, resulting in a **25%** reduction in response time. Implemented API management using **MySQL** and **Express.js**, optimizing data retrieval and improving system performance by **30%**.
 - * **Gem**: Contributed to the integration of **Gem (Government e-Marketplace)**, improving transaction processing times by **20%**, streamlining data synchronization, and enhancing user experience. Utilized **REST APIs** to ensure seamless data exchange and boost system performance, resulting in **98%** data accuracy.

- **Application Development:** Planned applications using **Android Studio**, integrating **MySQL databases** for efficient data management and **PHP REST APIs**, increasing backend functionality efficiency by **30%**.
- **Frontend and Full-Stack Expertise:** Proficient in **HTML**, **CSS**, and **JavaScript**, leveraging these skills to enhance user interfaces, increasing user engagement by **35%** and reducing page load time by **20%**.
- **System Maintenance and Support:** Maintained critical applications like **SPARROW** and **PIMS**, ensuring **99% uptime**, reducing downtime by **15%**, and optimizing system performance by **20%**.
- **Technical Assistance:** Provided technical support to officers and custodians of Union Territories, achieving a **95% satisfaction rate**, ensuring seamless functionality, and resolving issues efficiently.
 - * **SPARROW:** Optimized the **SPARROW** system by improving data management processes and integrating multiple modules, resulting in a **30%** increase in processing efficiency for officer records. Streamlined workflows and optimized data handling, ensuring seamless integration and faster processing times.

PROJECT

Smart Factory Monitoring System (MES + EMS)

Full Stack Developer

Technologies: React.js, Node-RED, MySQL, Tailwind CSS, Chart.js, Highcharts

- Designed and developed real-time industrial dashboards to monitor **OEE (Availability, Performance, Quality)** across multiple machines.
- Integrated **Node-RED APIs** with **MySQL** for live machine and energy data processing.
- Built machine-wise **energy tracking system** with interactive charts.
- Improved operational efficiency by **25%** through automation.

4M Change Management System

Full Stack Developer

Technologies: React.js, Node.js, Express.js, MySQL, Sequelize

- Developed system to manage **Man, Machine, Material, Method** changes.
- Implemented **multi-level approval workflow** (Operator → Supervisor → Admin).
- Integrated **RBAC** and audit logs for secure access control.
- Built scalable backend APIs using Express.js and Sequelize.

Preventive Maintenance Management System

Full Stack Developer

Technologies: JavaScript, Node-RED, MySQL, Tailwind CSS

- Designed maintenance scheduling system supporting weekly, monthly, and yearly plans.
- Developed **alert mechanism** using alert days for proactive maintenance.
- Implemented full **CRUD operations**, filtering, and Excel export.
- Integrated Node-RED APIs for real-time maintenance tracking.

Digital CheckSheet System

Developer

Technologies: JavaScript, Node-RED, MySQL

- Digitized inspection processes into **real-time checklist system**.
- Implemented **OK/NG tracking** and machine-wise logs.
- Integrated with production dashboards for analysis.

Role-Based Access Control (RBAC) System

Backend Developer

Technologies: Node.js, Express.js, MySQL

- Designed scalable **RBAC architecture** for user-role-permission management.
- Implemented secure **API middleware** for authorization.
- Enhanced system security across admin panels.

Real-Time Log Book and Production Dashboard

Developer

Technologies: Node-RED, MySQL, Chart.js, WebSocket

- Developed real-time production monitoring dashboard.
- Implemented **RPM alerts** and KPI tracking (Pass/Fail, Cycle Time).
- Built live data visualization using WebSocket and Chart.js.

Energy Monitoring System (EMS Dashboard)

Developer

Technologies: Node-RED, MySQL, Chart.js

- Developed system for **machine-wise energy consumption and cost tracking**.
- Implemented trend analysis dashboards using Chart.js.
- Integrated backend APIs for real-time energy insights.

Visitor Management System

Frontend Developer

Technologies: React.js, Tailwind CSS

- Built visitor entry and pass management system with **multi-role access**.
- Implemented pass generation, verification, and dashboard analytics.

TaskFlow – Cloud-Based Task Management Platform

Full Stack Developer

Technologies: React, Node.js, Express.js, MongoDB, Firebase

- Developed MERN-based task management platform with authentication.
- Implemented role-based access and real-time task tracking.

Kanpur AC Wala – Service Marketplace

Freelance Developer

Technologies: HTML, CSS, JavaScript, PHP, MySQL

- Built service marketplace platform with booking and technician onboarding.
- Successfully onboarded **2000+ users**.

Lucknow AC Wala – HVAC Services Website

Freelance Developer

Technologies: HTML, CSS, JavaScript

- Developed responsive HVAC services website.
- Improved customer engagement through digital platform.

Lucknow Tiffin Station Website

Freelance Developer

Technologies: HTML, WordPress

- Developed subscription-based tiffin service website.
- Increased online orders by **20%**.

EDUCATION

Bhabha Institute of Technology

Aug 2017 – March 2022

B.tech(CSE) - CGPA - 7.10

Kanpur, Uttar-Pradesh

MSDIC

July 2017

Intermediate - PCM - Percentage - 69.73%

Deoria, Uttar-Pradesh

SKILLS AND TECHNICAL PROFICIENCIES

Programming Languages: JavaScript, SQL, Core Java

Frontend Development: React.js, HTML5, CSS3, Tailwind CSS

Backend Development: Node.js, Express.js, Node-RED

Database Management: MySQL, MongoDB

API Integration: REST APIs, Postman

Visualization Tools: Chart.js, Highcharts

Authentication & Security: JWT, RBAC (Role-Based Access Control)

Real-Time Systems: WebSocket, Live Data Monitoring

Version Control & Tools: Git, GitHub, VS Code

Other Skills: CRUD Operations, Performance Optimization, Industrial Automation Systems