VIPINKUMAR SIVAKUMAR – NEUDESIC TECHNOLOGIES

Summary

Vipinkumar Sivakumar is an engineering graduate proficient in Python. He is distinguished by his strong interpersonal skills, effective leadership, and adept client relationship management. His unwavering determination, coupled with rapid learning abilities, enables him to consistently meet deadlines, making him a valuable asset in dynamic professional settings.

Skill Summary

- **Programming languages:** Python3
- **Integrated Development Environment**: Visual Studio Code
- **Other Technical Skills:** Microsoft Office, Arduino, node MCU, HASSIO, Raspberry PI

Projects details

Connected Automated System Using MQTT, Google Assisted Voice assistant And NFC Tags

January 2022 – June 2022

Developed a Centralized Automation System Leveraging MQTT, Google Assisted Voice Assistant, and NFC Tags. This innovative project enables remote control and automation of household appliances, resulting in improved operational efficiency and optimized energy utilization. This accomplishment reflects my proficiency in IoT and automation technology, showcasing my ability to drive efficiency and innovation in complex technical projects.

Role: Developer

Responsibilities

- **Project Development**: Spearheaded the end-to-end development of the Centralized Automation System, from conceptualization to implementation with HASSIO.
- **Technology Integration**: Integrated MQTT, Google Assisted Voice Assistant, and NFC Tags into the system, enabling seamless communication and control of domestic appliances.
- **Hardware and Software Integration**: Oversaw the integration of both hardware and software components, ensuring seamless compatibility and functionality.
- **Testing and Quality Assurance**: Conducted rigorous testing procedures to guarantee the system's reliability and performance, resolving any issues promptly.
- **Budget Management**: Managed the project budget effectively, optimizing resource allocation for cost-efficiency.
- **Project Documentation**: Maintained detailed project documentation, including progress reports, technical specifications.
- **Project Presentation**: Presented the project's objectives, progress, and results to Professors, ensuring clear communication of project status.

Environment: node MCU, Raspberry PI, HASSIO

Automated Speed Control Indicator **August 2020 – November 2020**

Engineered an Automated Vehicle Speed Control System utilizing Arduino, RF Module, and GSM Module. This innovation provides real-time speed notifications to drivers in speed-restricted areas while simultaneously relaying messages to relevant authorities for enhanced safety.

Role: Developer

Responsibilities

- **Project Development**: Spearheaded the complete development lifecycle of the Automatic Vehicle Speed Control System, from conceptualization to deployment.
- **Technical Integration**: Integrated Arduino, RF Module, and GSM Module, ensuring seamless communication and data transmission.
- **System Design**: Designed the system architecture to ensure optimal functionality, safety, and real-time responsiveness.
- **Testing and Calibration**: Conducted rigorous testing and calibration procedures to guarantee the system's accuracy and reliability.
- **Notification Algorithms**: Developed algorithms for real-time speed detection and alert notifications to drivers in speed-restricted zones.
- **Automated Reporting**: Implemented a reporting mechanism that automatically communicates speed violations to relevant authorities, promoting road safety with GSM Module.

Environment: Arduino, C++, GSM, RF Transmission

Education

Bachelor of Technology (B. Tech) in Electrical and Electronics Engineering from Govt. Model Engineering College, thrikkakara.
Higher Secondary Education in Computer Science from Basel Evangelical Mission Higher Secondary School, Palakkad.
SSLC from Kendriya Vidyalaya, Kanjikode.

Certifications