APPU M

+91 8861357375 | appua0126@gmail.com | LinkedIn | GitHub

Results-driven Software Development Engineer with **2+ years of experience** specializing in Flutter, Dart, Python, and SQL optimization, with a proven track record in backend development, IoT integration, and real-time data visualization. Adept at designing and delivering scalable software solutions and user-centric applications, driving operational efficiency and business growth. Recently promoted to **Software Development Engineer** at Herin Electronics, reflecting expertise in software design, problem-solving, and collaborative teamwork.

PROFESSIONAL EXPERIENCE

Herin Electronics

Software Development Engineer   **January 2025 – Present**

- **Software Development:** Designed, developed, and implemented scalable software solutions tailored to business needs, ensuring high performance and maintainability. Collaborated with the hardware team to establish connections with devices, enabling seamless data reading and integration from hardware components.
- **Full-Stack Development:** Built and maintained end-to-end IoT solutions, combining backend scalability and frontend responsiveness for enhanced user experiences. Added features like task prioritization, reminders, in-app advertisements, and subscription models, increasing project adoption and revenue potential.

Application Engineer   **January 2023 – January 2025**

- **Flutter Development Expertise:** Developed cross-platform applications using **Flutter** and **Dart**, Built multimedia streaming apps (audio, video, PDFs), achieving 5,000+ downloads and user engagement.
- **Backend Maintenance and Optimization:** Optimized SQL queries to significantly reduce response times and improve overall application efficiency, Designed and implemented scalable database architectures to handle high loads and support concurrent users effectively.
- **Real-Time Data Visualization:** Engineered IoT dashboards with real-time data processing, improving report generation speed and **data processing** efficiency .Integrated **IoT devices** using **MQTT protocols**, which reduced data latency and enabled customizable user interactions.
- **Tech Stack**: Python, Flutter, Dart, SQL, MQTT, Apache2, Nginx, Ubuntu, MVVM Architecture, PyCharm, Git, GitLab, Postman.

SKILLS

- **Cross-Platform Development:** Expertise in building cross-platform mobile applications.
- **API Design and Integration:** Skilled in designing and integrating RESTful APIs
- **SQL**: Expert in query optimization, scalable database design, and performance tuning.
- **Python and C++**: Skilled in developing automation scripts, backend solutions, and embedded systems.
- **Apache and Nginx**: Expertise in server setup, configuration, and management for reliable hosting.
- **OS**: Proficient in development and deployment using Ubuntu, macOS, and Windows.
- **Postman and phpMyAdmin**: Experienced in API testing and database management.

CORE STRENGTHS

- Problem-solving and Analytical thinking.
- Leadership and Teamwork
- Effective communication and collaboration.
- Quick adaptation to emerging technologies.

SELECTED PROJECTS

Vishwanandini App (Android & iOS)
- Developed and maintained the Vishwanandini App for multimedia streaming of audio, video, and PDF content, ensuring efficient resource utilization for smooth performance across devices.
- Integrated push notifications with Firebase Cloud Messaging (FCM) for real-time alerts and enhanced user engagement.
- Connected the app to backend servers via RESTful APIs for real-time content updates and implemented deep linking for direct access to specific app content, increasing user satisfaction and app usability.
- Built user-friendly interfaces with smooth navigation, intuitive touch gestures, swipe interactions, and dynamic routing, leveraging BLoC for efficient state management and API integration.
- [Click to open Android App](#)
- [Click to open iOS App](#)

Excel Comparison and Validation
- Developed a Flutter-based Desktop app to upload and compare Excel files, validating specific fields, including date matching and calibration data validation.
- Implemented calibration validation logic to ensure the accuracy of numerical data and consistent measurement units across files.
- Integrated Python API for backend processing, which reads Excel files, performs field validation, and compares calibration data, reducing manual validation efforts by 40%.
- **Tech Stack**: Flutter, Dart, Python (Flask/Django), Pandas, openpyxl, SQL.

IoT Dashboard for Data Management
- Developed a comprehensive **IoT dashboard** for real-time data visualization and report generation, incorporating serial port data acquisition.
- Enhanced accuracy and reduced reporting time by 30%, enabling improved client decision-making.
- **Tech Stack**: Flutter, Dart, SQL, MQTT, Apache, Nginx.

EDUCATION

Master of Computer Applications (MCA)

Karnataka State Open University, Karnataka, India

CGPA: 8.3 (Graduation: Expected 2025)

Bachelor of Computer Applications (BCA)

Davangere University, Karnataka, India

CGPA: 8.9 (Graduation: 2022)

CERTIFICATIONS

- [Software Engineering Certificate by HackerRank.](#)
- [SQL Intermediate Certification by HackerRank.](#)

DECLARATION

I hereby certify that the information provided is true and accurate to the best of my knowledge.