VIGNESH S

Software Engineer – C++ | Win32 API | MFC | Industrial Automation (Honeywell EPKS/UOC)

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PROFESSIONAL SUMMARY

Software Engineer with 3 years of experience in **C++ development, industrial automation, and real-time control systems**. Skilled in **MFC, Win32 API, Qt/QML, ClearCase, and Honeywell Experion PKS (EPKS)**. Improved developer efficiency by **50%** through automation tools and scripting. Strong expertise in **UOC/ACE controller** testing, UI engineering, and SDLC-based development.

TECHNICAL SKILLS

Languages: C++, Win32 API, MFC, Qt, QML, XML, Batch Script
Tools: Visual Studio, ClearCase, Coverity, Inno Setup, VBA
Platforms: Honeywell EPKS, ACE Simulation, Physical/Virtual UOC
Practices: SDLC, Unit Testing, Integration Testing, Debugging, Code Review

KEY ACHIEVEMENTS

- Automated internal workflows using C++, Python, and batch scripts, reducing manual effort by **50%**.
- Designed the **Motor Block configuration UI** using MFC, improving configuration clarity and reducing errors.
- Performed UOC recovery and troubleshooting during development cycles, ensuring stable test environments.
- Migrated legacy GUI tools to modern **CLI utilities**, improving performance and maintainability.
- Reduced release time by optimizing deployment using **Inno Setup**.

PROFESSIONAL EXPERIENCE

Software Engineer — Jan 2023 – Present

Utthunga Technologies

EPKS Control Builder Block Development

Development of industrial control blocks for Honeywell Experion PKS.

- Developed multiple EPKS control blocks using **C++, XML, MFC, and Win32 API**.
- Participated in requirement analysis, design, implementation, testing, and documentation.
- Created automation tools for XML generation, code templates, and error-handling workflows.
- Built MFC-based UI components for Motor block and configuration utilities.
- Configured UOC (Model 520/530) setups and handled controller recovery during validation.
- Used ClearCase for source control and static analysis tools for code quality improvements.

Tech Stack: C++, XML, MFC, Win32 API, Python, Batch Script, ClearCase, Inno Setup
Controllers: UOC (Physical & Virtual), ACE Simulation

NOJA DCM Project

Next-generation Device Configuration Management (DCM) software.

- Debugged and resolved performance issues in the DCM application.
- Migrated legacy GUI utilities to **CLI tools**.

- Enhanced system speed through code refactoring and optimization.
- Worked with QA teams for verification and testing coverage.

Tech Stack: Qt, QML

EDUCATION

Bachelor of Computer Applications (BCA) **2024–2026 (Pursuing)**
Bharathidasan University

Diploma in Computer Engineering (DCE) **2022**
Ramakrishna Mission Polytechnic College **92%**

CERTIFICATIONS

- C++ Essential Training – LinkedIn Learning
- Windows Programming Using C++ & MFC – Udemy
- Agile Software Development – LinkedIn Learning (PMI, CompTIA)
- Code Review Best Practices – LinkedIn Learning

ADDITIONAL INFORMATION

Domains: Industrial Automation, Embedded Concepts, Control Systems, Real-Time Systems
Strengths: Debugging, UI Development, Automation, Documentation, Fast Learning
Languages: Tamil (Native), English (Professional)