KOMATSU
Komatsu Pakistan Soft
1st Floor Mandeer Square Plot # 12-C/1 G-8 Markaz, Islamabad (44000) Pakistan
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Position Title	Senior C++ Software Engineer (Qt & MFC)

Why should you join Komatsu Pakistan Soft?

Komatsu Pakistan Soft is a fully owned subsidiary of Komatsu Limited Japan, and we are a part of Komatsu Group of Companies. Komatsu Pakistan Soft (Pvt.) Limited is into operation since 1999. We excel in providing enterprise software application solutions, IT consultancy and outsourcing services. Our vision, utter commitment, sheer dedication, unmatched teamwork and customer-centric approach have helped us evolve into a forerunner of innovation and ingenuity within Komatsu group as well as across the global IT industry.

Industry	Information Technology
Employment Type	This is a full-time on-site contractual role, 5 days a week
Job Level	This is a Mid-Level Role with 03 to 04 years of experience
Education	BS in Computer Engineering/Embedded Systems or other equivalent degree.
Location	G-8, Islamabad

About Your Role:

We are looking for a talented Embedded Application Developer to join our development team on a six-month contractual basis. The selected candidate will be responsible for developing embedded, industrial, or hardware-integrated applications.

Your Impactful Goals Will Include:

- Maintain, troubleshoot, and enhance large-scale Qt/C++ applications and an established legacy MFC/C++ application.
- Experience developing cross-platform applications and familiarity with Windows and Android APIs, platform-specific integrations, and deployment requirements.
- Analyze existing software architecture, codebases, dependencies, and application workflows to understand complex implementations.
- Investigate and resolve software defects, crashes, memory leaks, performance bottlenecks, and stability issues.

- Implement new features and modifications while minimizing regression risks.
- Integrate Qt and MFC applications with hardware interfaces, communication protocols, external libraries, and backend components where required.
- Diagnose and resolve UI, multithreading, performance, and application lifecycle issues.
- Apply sound C++ programming principles, object-oriented design, and appropriate software design patterns.
- Use modern C++ features where compatible with existing codebases, compilers, and platform constraints.
- Manage object lifetimes, resource ownership, pointers, references, and exception handling safely.
- Review code for correctness, maintainability, performance, and reliability.
- Develop unit tests and regression tests where practical.
- Follow established coding standards, version-control practices, and software development workflows.

Functional Skills Requirement:

- 4–5 years of experience maintaining and enhancing large-scale industrial C++ applications, with strong proficiency in C++ OOPs and Multithreading.
- Professional experience developing and maintaining Qt/C++ applications.
- Experience with Qt Widgets, QML, signals and slots, Qt Designer, and Qt application architecture.
- Familiarity with modern C++ standards, including C++11/14/17 or later.
- Experience with CMake, MSBuild, Visual Studio, and native C++ build environments.
- Familiarity with multithreading, synchronization, inter-process communication, and Windows APIs.
- Experience integrating software with hardware, serial communication, networking, or external SDKs.
- Experience in firmware development, the ability to interpret electrical schematics, and familiarity with communication protocols such as I^2C, SPI, and UART, along with Python programming and Windows batch scripting, are considered strong advantages.
- Experience with OpenGL is highly desirable.

- Familiarity with legacy MFC applications and the ability to troubleshoot and maintain existing MFC/C++ code is a plus.
- Experience in firmware development, the ability to interpret electrical schematics, and familiarity with communication protocols such as I^2C, SPI, and UART are considered strong advantages.