



EMBEDDED SOFTWARE DEVELOPER – REAL TIME OPERATING SYSTEM

Corporate Description

MANNARINO Systems & Software Inc. is a leader in providing safety-critical systems & software engineering services to the aerospace, defense, space, simulation & power generation industries. We work with many of the top players within their industries giving our employees exposure to the most interesting and challenging development projects. This stimulating and invigorating working environment allows our team to be at the technological forefront constantly broadening their expertise and honing their skillset to fulfill the ever-growing global high-tech market needs.

The MANNARINO culture is focused on high quality, hard work, professionalism and team work within a highly respectful, motivating atmosphere geared towards long-term business growth.

As a member of our team, you will benefit from:

- a comprehensive group insurance and RRSP plan
- a flextime policy with paid overtime and off-site placement premiums
- discretionary bonuses
- a fitness reimbursement program
- other office perks such as catered weekly lunches and free hot beverages (espresso, coffee, hot chocolate and tea)

MANNARINO is a privately-held Small & Medium Size Enterprise (SME)

[*Named among Canada's top SME Employers since 2015.*](#)

Career Opportunity and Primary Roles / Responsibilities

We are currently seeking software engineers/analysts to support the development of embedded software for several on-going Aerospace projects including Flight Management Systems, Fuel Management Systems, Health and Usage Monitoring systems, Real-Time Operating Systems, and Ground Collision Avoidance Systems. The positions are based in Montreal.

The candidate's excellent technical skills will be used to design, develop and maintain software based on system specifications. The software code developed may cover a wide range of programming languages and address both low-level operating system software components and higher level application elements. The candidate will ensure the use of appropriate standards, processes, procedures and tools throughout the product development life cycle to support the embedded software generation.

Interfacing with customers, suppliers, application users and other technical and support personnel may also be required. The candidate must be able to work independently and in collaboration with other team members and project stakeholders. Excellent communication skills will be required.

Although the primary role would be to develop embedded software, opportunities for professional growth in other areas like software verification, systems engineering, and aircraft simulator development may arise.

Required Competencies

- Bachelor's degree in computer science or related engineering disciplines from an accredited institute
- Experience in software engineering techniques, design methodologies (including UML to communicate ideas and architecture) and software development practices (e.g. Waterfall, Agile)
- Significant experience with C/C++ Programming Languages.
- Significant experience with Real-Time operating systems, for example:
 - Kernel development contribution.
 - Kernel configuration.
 - Board support package or device driver development.
- Experience with development tools architecture and configuration (Eclipse, GDB, GCC ...)
- Experience with a range of chipset architectures (PowerPC would be preferable)
- Experience in the use of emulators, logic analyzers, language simulators and software probing equipment
- Experience in Integrating Real-Time Embedded and Application Software, including Hardware/Software Integration
- Excellent Communication Skills
- Ability to report work status concisely and accurately to the Project Manager as requested
- Self-Motivated Team Member

Other Competency Assets

- Experience with other programming languages (e.g. Assembly, Ada, C#, Microsoft .Net/WPF)
- Knowledge of RTCA/DO-178C or other safety-critical software life cycle process
- Knowledge of Integrated Modular Avionics (RTCA/DO-297, ARINC 653, ARINC 661, ARINC 664)
- Knowledge of Communication Protocols (Ethernet/AFDX, ARINC 429, RS 422, CANbus and USB 2.0)
- Experience with Linux, VxWorks, Integrity or μ C/OS-II

Miscellaneous Requirements

- Ability to communicate effectively in English and French (oral and written)
- Occasional travel required to customer sites (usually within North America)
- Possibility of assignment to customer site within the Montreal area
- Must be a Permanent Resident or Citizen of Canada

Please submit your application by
E-mail: rh@mss.ca

*We are an equal opportunity employer.
All applicants will be held in strictest confidence.
Only those selected for interview will be contacted.*
