



EMBEDDED LOW LEVEL SOFTWARE DEVELOPER - INTERMEDIATE

Corporate Description

MANNARINO Systems & Software Inc. holds over 20 years experience in designing, developing, verifying, and certifying real-time embedded software for safety critical applications, thanks to a unique combination of services and [COTS products](#).

MANNARINO Systems & Software Inc. customer base is very large, covering traditional aerospace companies as well as new and exciting markets, including electric propulsion, [Urban Air Mobility](#), [Unmanned Aerial Vehicle](#) and autonomous flight.

The MANNARINO culture is focused on high quality, hard work, professionalism, and teamwork 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
- discretionary bonuses
- a fitness reimbursement program
- other office perks such as catered weekly lunches and free hot beverages (espresso, coffee, hot chocolate, and tea)
- regular company outings

MANNARINO is a privately-held Small & Medium Size Enterprise (SME) and was recently awarded the [AIAC's Innovation Technology Award](#)

Career Opportunity and Primary Roles / Responsibilities

- Work with System Engineers, Embedded Application Software developers and MANNARINO customers to specify and design board support packages and M-RTOS product evolutions (including porting to new processor architectures)
- Integrate software onto partners/customers proprietary boards
- Develop robust, reliable, efficient, and testable low-level software interfacing with sensors, actuators, and other peripherals
- Develop software documentation in accordance with the project certification requirements/guidelines
- Support the software verification effort

Required Competencies

- Bachelor's degree in Computer Science, Software, Embedded Systems, or similar area with software focus.

More than 5 years of demonstrated experience in the following areas:

- Embedded software development in C language
- Real-time operating systems, processor architectures, communication protocols, device drivers, communication buses, etc.
- Software development in a safety critical context (RTCA DO-178, EN 50128, IEC 62304, etc.)
- Knowledge of standard interfaces and interactions between low-level software and hardware blocks (CPU cores, DSPs, special-purpose accelerators, on-chip peripherals, etc.).

Other Desired Competencies

- Experience with scripting languages (Python preferred)
- Experience in continuous integration and continuous testing processes
- Experience with Lauterbach development tools
- Experience with PCIe
- Knowledge of ARINC 653
- Experience with ST32 or QorIQ processor families
- Experience with Ethernet stack development
- Experience with Network Interface Cards drivers' development
- Experience with ARINC429 adapter drivers' development
- Experience with CAN Bus drivers' development

At MANNARINO, we believe that passion and a desire to learn is crucial. Diversity of thought and experiences leads to innovative solutions and creativity. Therefore, we would like to encourage all those interested to apply.

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.*
