



## SYSTEMS ENGINEER/ANALYST

### 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)
- regular company outings

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

[Named among Canada's top SME Employers in 2015 and 2016.](#)

### Career Opportunity and Primary Roles / Responsibilities

We are currently seeking junior to senior systems engineers/analysts to support the development and testing of aerospace systems that include Fuel Management Systems and Health & Usage Monitoring Systems. The positions are based in Montreal with occasional travel to support the project.

Primary responsibilities include reading and understanding aircraft systems specifications, decompose the aircraft system specifications into sub-system specifications and software requirements documents in accordance with company and industry standard methodologies. Involvement in all aspects of the system and software development life cycle is expected.

Interfacing with customers, suppliers, application users and other technical and support personnel will also be required. The candidate must be able to work independently and in collaboration with other team members and project stakeholders on multiple projects simultaneously. Good communication and technical skills is desired.

Although the primary role would be in systems engineering, opportunities for professional growth in other areas like software development, software verification, simulation engineering may arise.

### **Required Competencies for Senior (junior and intermediate as expected to meet them partially)**

- Bachelor's degree in computer science or related engineering disciplines from an accredited institute
- Knowledge of Guidelines for Development of Civil Aircraft and Systems (SAE ARP 4754A)
- Experience in developing and testing aircraft systems
- Experience in systems and software engineering techniques, design methodologies and software development practices (e.g. Waterfall, Agile)
- Working experience with Software and Hardware -In-The-Loop verification environments (e.g. dSPACE, Opal-RT, Labview)
- Knowledge of 'scripting' languages and environments typically used for test script development (e.g. Python, XML, Google C++ Testing Framework)
- Good Communication Skills
- Ability to work autonomously and report work status concisely and accurately
- Dynamic and motivated team member

### **Other Desired Competencies**

- Knowledge of Guidelines And Methods For Conducting The Safety Assessment Process On Civil Airborne Systems And Equipment (SAE ARP 4761)
- Knowledge Experience with programming languages (eg. C, C++, Assembly, Ada, C#, Microsoft .Net/WPF)
- Working knowledge of Integrated Development Environments (e.g. Microsoft Visual Studio, Eclipse, GCC)
- Ability to read and understand electronic hardware wiring diagrams
- Knowledge of Model-Based Development Methods & Tools: UML, Simulink
- Knowledge of Communication Protocols (Ethernet/AFDX, ARINC 429, RS 422, CANbus and USB 2.0)
- Knowledge of Integrated Modular Avionics (RTCA/DO-297, ARINC 653, ARINC 661, ARINC 664)

### **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 eligible to work in Canada
- Must be a Canadian citizen or permanent resident

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

**Please submit your application by**

**E-mail: [rh@mss.ca](mailto: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.*

---