



Flight Software Developer

Job Overview

Microsat Systems Canada Inc. (MSCI) is a leading privately-held Canadian corporation in design, build and operation of space hardware, and a leader in the development and manufacturing of spacecraft reaction wheels and rate measurement units. We are currently seeking an individual to fill a Flight Software Developer position within the engineering team. This is a full-time position.

Duties and Responsibilities

- Develop and maintain real-time embedded flight software for space equipment
- Work with electrical engineering staff to provide requirements input for, and to review and comment on hardware designs and design improvements
- Work with control specialists to implement, support and maintain space equipment control software
- Develop and maintain ground test software to interface with flight hardware for testing, evaluation and maintenance purposes
- Software design documentation
- Software unit and system testing using ground support software
- Code review of other teammates
- Support Non-Conformance Reporting (NCR) investigations and remedial actions

Education/Experience Requirements

- Bachelor's degree (or higher) in Computer Science or Electrical Engineering
- Minimum 5 years of experience in developing real-time embedded software
- Familiarity with VHDL, FPGA/CPLD development tools and verification techniques,
- Expert in reading, understanding, developing, and debugging software in C, C++, Assembler
- Experience with source code version control systems Git or similar
- Demonstrated experience in critical thinking, problem solving and trade space design studies
- Ability to write clear and concise technical design documents, work instructions, test procedures, forms, and records for use in testing / assembly



- Ability to work effectively independently and in a team environment with limited supervision
- Strong attention to detail
- Strong written and verbal communication skills
- Ability to rapidly change roles/responsibilities while working in a high-paced, challenging work environment
- It is a condition of employment that the employee obtain and maintain, through the Company, eligibility for access to controlled goods and / or technology in accordance with the policies and regulations of the Controlled Goods Directorate of the Government of Canada
- Canadian Citizen or Permanent Resident and living in Canada

Bonus Points

- Understanding of electrical circuit schematics
- Familiarity with space systems design
- Experience in hands-on hardware testing and debugging
- Familiarity with Matlab/Simulink and Python
- Experience with VxWorks, CANOpen