



R. T. Canada Inc.

229 Yonge Street, Suite 400, Toronto, Ontario M5B 1N9 Telephone: 647 256 1466

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Date: February 7<sup>th</sup> 2017

Contract Position: Develop Test Code for Avionics Software Certification

**Who we are:**

[Richland Technologies Canada](#) (RTC) is a software engineering company specializing in low-level driver development for embedded computing systems used in avionics, automotive, medical, and industrial control applications. The software and hardware products developed by RTC are most often used in display systems, although we have also undertaken a variety of projects, such as porting low-level embedded software from one hardware platform to another, developing test and certification evidence for Commercial Off the Shelf (COTS) inertial sensors, as well as developing safety functions for energy storage systems, and hoist systems for the live entertainment industry. In particular, RTC is expert in writing graphics and video drivers that run on Real Time Operating Systems (RTOS) for use in the aerospace and other safety-critical industries.

**Who we are looking for:**

We are looking for a person with excellent C-language programming skills, who is very much interested in low-level software engineering, to help us write test case software for complex embedded systems. The purpose of this test case software is to validate software as part of the process of meeting the FAA's DO-178C Guidelines for Safety Critical Software, as well as other standards including IEC-61508 and ISO-26262 that are commonly used in the industrial control and automotive industries.

We are also greatly interested in individuals who are familiar with graphics driver or graphics application development using the OpenGL and/or Direct X APIs, as well as the use of OpenCL and Vulkan APIs for GPGPU (General-Purpose computing on Graphics Processing Unit) applications. If you have the requisite C skills, and have knowledge of graphics driver software, then you are encouraged to apply.

The successful applicant will work under the supervision of a senior software engineer, and will be based in our downtown Toronto office, which is at the corner of Yonge and Shuter Streets. After some initial training, the contractor will work in the office, with minimal direct supervision.

In other words, you must be:

1. Skilled in C programming language (OpenGL, Direct X, OpenCL and/or Vulkan are bonuses).
2. Familiarity with modern software testing tools is a definite plus.
3. Familiarity with Structural Coverage Analysis of code is a bonus.
4. Highly dependable – able to work on your own, but also to know when to ask for help from other team members.
5. Be adaptable, as tasks are likely to change at short notice.



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6. Willing to work with one of the very best teams of low-level software engineering people around.

**Length of Contract:**

Up to eight months, with the possibility of an extension, depending upon our work load.

**Work Details:**

1. Work week: 40 hours per week.
2. Pay rate: Skills-based.
3. Paid: Every two weeks.

Note: This is a contract position. There are no benefits available, and the successful applicant is responsible for paying his/her own taxes, CPP, and EI (if applicable).

4. You will be required to sign a Non Disclosure Agreement.
5. Position availability: TBD, but within February preferred.

This position would be of interest to recent graduates, or 3<sup>rd</sup> or 4<sup>th</sup> year students, in the Computer Engineering faculty.

References will be required.

Please send your resumes and covering letter to [resumes@richlandtechnologiescanada.com](mailto:resumes@richlandtechnologiescanada.com)