



Embedded Software QA Analyst

Position Type: Full-Time

Location: Waterloo, Ontario

We are looking for experienced Quality Assurance Analysts, at the junior or intermediate level, to be a part of our world class development team creating software for the most sophisticated airplanes and unmanned aircraft systems (UAV/UAS) in existence. As an embedded software QA analyst, you will be a key member of our graphics and compute software quality team, working hands-on with hardware and software integration, to improve our safety critical embedded graphics drivers. CoreAVI is a highly successful safety critical solution provider and has led the definition of enabling standards such as the OpenGL SC 2.0 specifications. We are a key participant within the Khronos Group defining new safety critical graphics and compute standards, as well as members of the VITA hardware standards group. We pride ourselves on having world class OpenGL and OpenCL solutions powering today's and tomorrow's most advanced embedded avionics and automotive systems! Our core values are family, developing quality products, and team collaboration. Candidates must be self-driven, highly creative, and very resourceful.

Why work for CoreAVI?

CoreAVI is a company which fosters a cohesive work environment, encouraging teamwork and sharing organizational successes. If you are looking to join an organization which offers flexible hours, a talented and supportive team, an autonomous work environment, and niche software products relied upon worldwide, CoreAVI is the organization for you.

Some of the reasons our team enjoys working at CoreAVI are:

- **Technically challenging and rewarding work.** Working on the leading edge of new CPU and GPU technology, our team is always doing something new and innovative. The reward of seeing the work you contributed to driving the displays of the aircraft you are flying on is something you will never forget!
- **Teamwork.** Everyone says it but we really have it. Our team will not watch one-person struggle with an issue, they really do support them. Everyone is here to help because we know that meeting customer needs is critical to our success and working together is the only way to get there.
- **Small Company Culture.** As we have grown from a small company to the medium one that we are today, we have maintained the values we have always had. We have a great sense of camaraderie and a 'get it done' attitude which is not hindered by layers of company bureaucracy.
- **A company that is growing.** We know that when a company sticks to what they have always done, not only will they not grow, they'll fall backwards. That's why we're not frightened to lead our industry with innovative new products that customers need now and we react quickly to do it. To keep up with that growing demand, we are growing fast and we need more talent to help us.



As CoreAVI continues to grow and expand into new markets, we need creative, self-driven individuals to join our team and share in the success, but more importantly, enjoy the journey there. So, if you like the sound of what our team enjoys today, and you want to be part of our tomorrow, here's what we are looking for.

Main Responsibilities:

- Actively participate in all aspects of the software testing process, collaborating with testers, developers, management, and project stakeholders
- Execute tests and generate defect reports
- Prepare software releases for embedded systems
- Implement and maintain various test automation tools
- Testing, profiling and optimizing drivers and applications
- Working as a team to produce reliable, high quality, safety critical software
- Creating test cases and DO-178, DO-254 safety critical certification artifacts
- Create test plans and detailed test procedures
- Test environment management: create Windows and Linux build server VMs, install various build and software development tools, troubleshoot environment issues
- Update and maintain SConscripts and Python driver build scripts
- Troubleshoot failing tests and work with the appropriate resources to resolve issues

Required Skills:

- Bachelor's degree in Computer Science, Computer Engineering, or related Engineering field
- Good understanding of Software programming languages (C/C++, Python/Scripting)
- Thorough understanding of testing methodologies, including test automation
- Experience developing, debugging, and troubleshooting embedded software
- Superior attention to detail
- Experience with Manual, Automated, and Performance testing tools
- Experience with testing environments and frameworks
- Outstanding verbal and written English communication skills are crucial
- Strong organization and technical skills
- Excellent analytical / problem solving skills
- Ingrained sense of accountability and ownership
- Continuous drive for learning, pushing technical limits, and finding new solutions

Additional Assets:

- 1-3 years of experience in software or hardware quality assurance
- 1-3 years of experience in software development (preferably C)
- Experience with defect tracking and diagnosing software defects
- Experience with 3D graphics (preferably OpenGL or Vulkan)
- Experience with various operating systems (Linux, PikeOS, Windows, VxWorks, Integrity)
- Experience using GIT or other source code management tools
- Experience using Jenkins (build tools)