



Senior Vulkan Developer

Position Type: Full-Time

Location: Flexible

We are seeking an experienced Vulkan Developer to help create and improve our safety critical embedded graphics and compute 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 a world class team which develops the safety certifiable products powering today's and tomorrow's most advanced avionics and embedded systems across the world. Our core values are family, quality, and team collaboration. Candidates must be self-driven, highly creative, and very resourceful.

To learn more about CoreAVI or the aircraft our solutions fly in please visit www.coreavi.com

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.

For this position, we are offering flexibility to work in either our Waterloo Ontario office or remotely from home.

Why Be Excited About this Position?

- You will get the opportunity to work on the lowest levels of software stack directly interfacing with hardware such as BSPs, chip initialization, programming the hardware to execute graphics operations, etc.
- You will get to work on challenging problems such parallel computing in safety certified environments
- You get to be at the forefront of new software and hardware development for avionics
- You will work with state of the art graphics and compute APIs such as Vulkan/OpenCL/OpenGL
- With a magnitude of projects, your role never gets stale. You will always be working with new hardware and new projects. Our drivers run on hundreds of different platforms.
- High end development systems to ensure you can get the most done in a way that works best for you
- Working for an amazing company, filled with talented people, who love cool technology

Main Responsibilities:

- Developing next generation and improving existing embedded graphics and compute drivers
- Customizing our products for new embedded hardware and real-time operating systems
- Profiling and optimizing drivers and applications
- Creating test cases and DO-178 and ISO26262 safety critical certification artifacts
- Writing and reviewing technical specifications
- Working as a team to produce reliable, high quality, safety critical solutions

Desired Skills:

- Bachelor's degree in Computer Science or related field
- 7+ years of experience in software development (C/C++)
- Experience with Vulkan graphics is crucial
- Outstanding verbal and written communication is crucial
- Experience with embedded operating systems (VxWorks, Integrity, Linux, Deos, etc.)
- 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
- Experience developing, debugging, and troubleshooting embedded Vulkan, OpenGL, or OpenCL drivers an asset
- Experience with DO-178 or ISO26262 software development an asset

If you are interested in working for CoreAVI, please send your resume and some information about yourself to resumes@coreavi.com