



Diagnostics Inc.

XLV Diagnostics Job No #1006, Toronto ON - M4N

Job Title : Senior Embedded Developer

The Company:

XLV Diagnostics Inc. is a growing startup bringing high quality, low cost, x-ray technology to market. Our core technology is our detector based around the novel X-Ray Light Valve (XLV,) which creates very high quality images at a low cost. Our first product, a full sized mammography machine, is nearing release with upcoming clinical trials. We are always looking for talented multi-disciplinary engineers to join our team and drive forward our cutting edge medical imaging technology.

The Opportunity:

XLV Diagnostics Inc. has many engineering opportunities, including work in optics, electronics, mechanics, and software design. We are currently looking for a senior embedded developer to harden and enhance our back end. Work would focus on microcode development with forays into both our FPGA RTL and front end GUI as needed. While XLV expects a clean software design process, this is balanced against the rapid development required in a startup. In order to achieve this the software team is tightly nit with the electronic engineers, mechanical engineers, physicists, technicians and quality assurance.

The day to day work consists of ensuring correct and stable operation of a soft core embedded microprocessor, while adding new functions and improving performance. As the FPGA development continues and new hardware operations become available, you will be asked to build new drivers and associated functions. Work in the microprocessor is done in a multi-task RTOS, with several TCP/IP connections. Needed performance improvements will require an understanding of code and assembly analysis.

XLV's engineering group is a small dedicated team that is growing rapidly. In this environment your work will be meaningful and have a significant impact with the rest of the team. As we bring our product to market, your contributions will improve how healthcare is delivered around the world.

Experience Level:

- C language family coding - 7+ years
- Embedded C in the equivalent of NIOS or MicroBlaze Processors - 3+ years.
- A language of your choice - 3+ years.

Desired Skills:

- uC/OS2 and Nichestack experience
- Custom driver development
- Image Processing
- Experience with C# in Visual Studio
- Manipulation of large data sets
- Comprehension of the Fourier domain
- Understanding of Verilog and RTL design
- Familiarity with IEC 62304, IEC 60601, ISO 13485, or ISO 14971

Required Experience:

- Understanding of FPGA's
- Working knowledge of real time OS'
- Understanding of TCP/IP
- Optimization of code for performance
- Enthusiastic about version control
- Good documentation practices

Work with XLV Diagnostics may involve some travel to meet with vendors and visit other XLV sites. Address all applications to Peter Oakham, Chief Engineer - peter@xlvdiagnostics.com