



BlackTrax Firmware Developer (Part-Time)

About US

As leaders of innovation for almost 25 years, CAST-Software is an award-winning company, delivering design and previsualization software tools for lighting and event specialists all around the world. Not only that but we include real-time live tracking systems that work seamlessly with our 3D software tools, which are quickly becoming industry standards to use.

Precise and unique, offering continuity in design or freedom to experiment, our tracking system is the ultimate communication and control system. Studios, theatre and stages come alive as our tracking system communicates and controls robotic lights and cameras, laser systems, sound reinforcement and sound steering systems, multimedia display devices and interactive systems, and now communicating directly with third party gaming engines.

Driven by passion, creativity, and technology, we love to see our efforts allow projects reach their true potential using our products. Be it covering theatre, concerts, tours, any type of live entertainment, indoor or outdoor, including film and now the gaming industry, it's inspiring each time.

Our team of like-minded, driven people connect in our small, friendly work place, make magic happen.

If you share our passion, our drive for innovation, our commitment to customer excellence and pride in being a leader come and join us.

Check out www.cast-soft.com for more information about us, our products and what we do and have done. We are sure you will be impressed. Then hit reply to this ad and send your resume with a cover letter, explaining why a job in tech at CAST is for you.

About the Position

As a part time **BlackTrax Firmware Developer**, you will work on the firmware for BlackTrax's hardware products including the Beacon, TimeKeeper, and Router. You will also work on the C++ Windows application that interfaces with them for programming and networking commands. Finally, you will also work in a Linux environment working on prototyping and potentially implementing features that work directly with the main software. You will report to the BlackTrax Development Team Lead and be assigned features and tasks as described in the current release. You will be part of a small team, being the sole developer working on the products mentioned above, so you will have an opportunity to work on large features as it relates to them.

Requirements

- Minimum of 3 years' experience delivering high-tech custom applications
- Firmware development experience for small hardware devices
- Experience working on low latency, high performance distributed network applications
- Proficient at C++, on Windows and Linux
- Knowledgeable of assembly language
- Solid knowledge of TCP/IP protocol and network programming
- JIRA, SVN, Git or other project management tools
- Leverage Agile software routines

Bonus

- Skilled in object-oriented software design and development, using design patterns effectively
- Multithreaded and multi-process application design
- Knowledge of GUI development such as Qt, MFC, BCG libraries
- Exposure to STL, boost library or other C++ containers, and build automation
- Experience with ROS libraries in Linux
- Some experience with Uni-code, OpenGL, Unreal, Unity or D3D to develop 3D graphics, and/or real-time programming, AutoCAD & other 3D CAD types
- Bonus marks for: MEMS sensor technology, 2.4 GHz wireless communication and/or RF communication

Soft skills

- You'll need to play well with others as one of an extremely dedicated team -- a small but solid group -- that will push you to grow
- You will need good verbal communications skills and be able to present and defend your ideas with the team, outside technology providers, and management
- Continue to maintain strong expertise and knowledge of current and emerging technologies
- Enthusiastic, dedicated and ready to conquer the challenging tasks with self-study and research in adequate time

Location:

CAST is located at 35 Ripley Avenue, Suite 1 on the southwest side of Toronto, ON (Tel: 416.597.2278). You can drive or take TTC (Queen streetcar to South Kingsway and walk a block, or the subway to Runnymede and a short bus ride), or bike in as some do weather permitting, plus lots of free parking is available on a first come basis.

Contact: Please email questions and resume to HR@cast-soft.com and be ready to chat. We will reply to you as soon as we can.