



## **BlackTrax C++ Software Developer**

### **About CAST**

CAST Software has been in business for over 22 years, and today we deliver the modelling, design and previsualization software tools of choice to professionals in the lighting design and events & entertainment production industries. We are driven by passion, creativity and technology and we love nothing more than to see the results of projects created with our software in theatre, concerts and other live entertainment productions, as well as TV and film.

You will be part of the team which provides technical assistance to the customers who use our award-winning products. *wysiwyg*, the first 3D lighting previsualization software ever developed, continues to be a leader in its market today and is used around the world. Vivien, our Event Planning software, offers planning and previsualization tools customized for event planning professionals. BlackTrax, a real-time 6D tracking system that tracks actors, objects, and props in order to control moving lights, media servers and projection, spatial audio, robotic cameras, and more. You may have seen the results of our software's contributions in productions like the Olympics Opening/Closing Ceremonies, the Super Bowl halftime shows, Eurovision Song Contests, Dancing with the Stars, various Cirque du Soleil and Disney shows, in concerts of bands & DJs such as U2, Muse, Goo Goo Dolls, The Chainsmokers and Dimitri Vegas & Like Mike, or even for the architectural lighting of Buckingham Palace for the Queen's Diamond Jubilee in 2012 and in our own city for the Bloor Viaduct (for the Toronto 2015 PanAm games), just to name a few.

### **About the Position**

**As a BlackTrax C++ Software Developer**, you will work on the main BlackTrax product. You will report to the BlackTrax Development Team Lead and be assigned features and tasks as described in the current release. Major releases are typically once every 3-6 months, with a beta release once every 1-2 months. You will be part of a small team (you plus the Team Lead and an intern) so you will have an opportunity to work on large features for the software.

### **Requirements**

- Minimum of 3 years experience delivering high-tech custom applications
- Experience working on low latency, high performance distributed network applications
- Skilled in object-oriented software design and development, using design patterns effectively
- Proficient at C++, on Windows and potentially Linux
- Knowledge of GUI development such as Qt, MFC, BCG libraries
- Solid knowledge of TCP/IP protocol and network programming
- JIRA, SVN, Git or other project management tools
- Leverage Agile software routines

## Bonus

- Multithreaded and multi-process application design
- Exposure to STL, boost library or other C++ containers, and build automation
- Some experience with Uni-code, OpenGL, Unreal, Unity or D3D to develop 3D graphics, and/or real-time programming, AutoCAD & other 3D CAD types
- Firmware development experience for small hardware devices
- 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 the TTC (Queen streetcar to South Kingsway and walk a block, or the subway to Runnymede and a short bus ride), or bike it in the summer.

## Contact

Please email questions and resume to [HR@cast-soft.com](mailto:HR@cast-soft.com). We will reply to you if you have been shortlisted.