sbkraeme@uwaterloo.ca

## SKILLS SUMMARY

- Strong Knowledge in C and C++(11) through work and school experience.
- Expert GNU/Linux user through home, work, and school use.
- Experience using various C++ toolkits, including STL, boost, and Qt.
- Experienced in multi-threaded programming through academic courses and previous work experience.

## **EDUCATION**

Candidate for Bachelor of Applied Science, Mechatronics Engineering University of Waterloo, ON Expected Graduation Date: April 2014

## Relevant Courses

Introduction to Computer Structures and Real-Time Systems (MTE 241),

Sept-Dec 2011

- Real-time operating systems course taught in C
- Included a group project to design a mock operating system within a GNU/Linux environment.
- Introduced threaded programming concepts and process control.

Concurrent Programming (CS 343),

Sept-Dec 2013

• Class on multi-threaded programming taught in uC++ (an extension for C++)

## WORK EXPERIENCE

Software Developer

Oracle, Endeca Server Team, Boston, MA

April-Aug 2013

- Worked on performance and scaling team for an anylytical database.
- Personal projects were cache improvements, and job cancellation.
- Coded in C++11, using gdb and valgrind.
- $\bullet\,$  Found and fixed a bug in cache eviction algorithm; increasing query performance by up to 10%.
- Gained experience working on thread scheduler code.

Software Developer

Aug-Dec 2012

Autodesk, Alias Team, Toronto, ON

- Completely redesigned the printing workflow, using Qt printing API in C++
- Gained experience using threaded programming techniques.
- Fixed bugs and added features in newly added modelling tools.

Design Engineer

Jan-April 2012

Avvasi Inc, Packet Processing Team, Waterloo, ON

- Worked on porting Internet Protocol parsers from an older product to a newer one in C++11.
- Gained knowledge of networking protocols, including RTMP, RTSP, and HTTP.