

# Simon Benjamin Orion Parent

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## EMPLOYMENT OBJECTIVE

I want to improve people's lives by solving interesting and challenging problems.

## SUMMARY OF QUALIFICATIONS

- Over twenty years of programming experience with various languages and platforms
- Adaptive to new problem domains; eager to learn new tools and methods
- Strong mathematical background
- Attentive to detail

## HIGHLIGHTED TECHNICAL SKILLS

- Languages: C, Python, C++, Racket, Assembly (ARM, x86), Shell Scripting, Ruby, Java
- Essential Everyday Tools: Linux, GNU Userland, Git, Vim, SSH, L<sup>A</sup>T<sub>E</sub>X

## EDUCATION

### Master of Mathematics in Computer Science, 2014

University of Waterloo, Waterloo, Ontario

Thesis: *How Programmers Comment When They Think Nobody's Watching*

<https://sboparen.github.io/commenting/>

### Bachelor of Mathematics, 2010

University of Waterloo, Waterloo, Ontario

Double Honours Co-op: Computer Science and Pure Mathematics

## CO-OP WORK EXPERIENCE

### Video Codec and Hardware Programmer

Magnum Semiconductor, May 2008 – August 2008 and January 2009 – April 2009

My main project was the development of a reference encoder for the VC-1 video codec standard which was designed to exactly match the output of the hardware encoder. I assisted in correcting the bugs that were revealed by mismatches on test video streams.

### 3D Graphics Programmer

Side Effects Software, January 2007 – April 2007 and September 2007 – December 2007

My main contribution to the Houdini software was major revisions to the algorithms for boolean operations on arbitrary surface geometry, which improved the numerical stability and handling of boundary cases.

## **Maintenance Programmer**

Research In Motion, January 2006 – April 2006

As a member of the Customer Response Team, I was responsible for fixing bugs in the BlackBerry Enterprise Server software and its administrative interface.

## **OTHER EXPERIENCE**

### **Teaching Assistant for Real-Time Programming**

University of Waterloo, September 2010 – August 2012

Beyond the expected duties, I used my knowledge from having taken the course to revise the stale course material. This was especially necessary since the course had recently undergone a major overhaul in transitioning from x86 to an ARM architecture.

## **SCHOLARSHIPS AND AWARDS**

- NSERC Alexander Graham Bell Canada Graduate Scholarship, 2010–2011
- David R. Cheriton Graduate Scholarship, 2010–2012
- Ontario Graduate Scholarship, 2011–2012
- University of Waterloo President's Graduate Scholarship, 2010–2012
- NSERC USRA Industrial Grant for Research and Development, 2008
- Association for Computing Machinery International Collegiate Programming Contest, World Finalist and Bronze Medallist, 2007 and 2008
- William Lowell Putnam Mathematical Competition, ranked 93rd percentile, 2008
- TopCoder Collegiate Challenge, World Finalist, 2006
- Microsoft National Scholarship, granted by the University of Waterloo, 2005–2009

## **VOLUNTEER ACTIVITIES**

- Event Coordinator and Stepchart Artist, UW Dance Dance Revolution Club, 2012–2014
- Assistant to the Laboratory Director, UW Computer Graphics Lab, 2012–2014
- Musical Comedy Playwright, *FASS for President*, FASS Theatre Company, 2013
- Assistant Stage Manager, *Sherlock's Excellent Adventure*, KW Little Theatre, 2012
- Assistant Technical Director, *FASS of the Titans*, FASS Theatre Company, 2011
- Problem Setter and Judge, International Olympiad in Informatics, 2010
- Volunteer Lecturer, Undergraduate Complex Analysis Seminar, 2009
- Problem Setter and Judge, Canadian Computing Competition, 2006–2008