

# Simon Benjamin Orion Parent

Kitchener, Ontario

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sboparen.github.io

## EMPLOYMENT OBJECTIVE

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

## SUMMARY OF QUALIFICATIONS

- Three years of industry experience with various languages and platforms
- Adaptive to new problem domains; eager to learn new tools and methods
- Strong mathematical background and attention to detail

## HIGHLIGHTED TECHNICAL SKILLS

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

## WORK EXPERIENCE

### Route Optimization Team Lead, Transit Labs, 2014/06 – 2016/05

I took the route optimization research prototype, and turned it into a complete software package, which now serves as the foundation of the RideCo product. This included the creation of a test suite, design of APIs to interface with other components, and packaging for cloud deployment. I was also responsible for the oversight and mentoring of the developers on the optimization team, contributions to overall system architecture, and leadership in planning activities relating to optimization features.

## EDUCATION

### Master of Mathematics in Computer Science, University of Waterloo, 2014

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

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

### Bachelor of Mathematics, University of Waterloo, 2010

Double Honours Co-op: Computer Science and Pure Mathematics

## INTERNSHIP WORK EXPERIENCE

### Video Codec Programmer, Magnum Semiconductor, 2008/05–08, 2009/01–04

Working independently, I developed 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, SideFX, 2007/01–04, 2007/09–12**

I made major revisions to the algorithms for boolean operations on arbitrary surface geometry, which improved the numerical stability and handling of boundary cases.

### **OTHER ACTIVITIES**

- Eighth Place (Individual Open Division), Internet Problem Solving Contest, 2016
- Certification Level N4, Japanese Language Proficiency Test (日本語能力試験), 2015
- Musical Comedy Co-Playwright, *FASS for President*, FASS Theatre Company, 2013
- Assistant Stage Manager, *Sherlock's Excellent Adventure*, KW Little Theatre, 2012
- Problem Setter and Judge, International Olympiad in Informatics, 2010
- NSERC Alexander Graham Bell Canada Graduate Scholarship, 2010
- World Finalist and Bronze Medallist, ACM International Collegiate Programming Contest, 2007 and 2008