

Simon Benjamin Orion Parent

Kitchener, Ontario

sboparen@gmail.com

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^AT_EX

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

- Certification Level N3, Japanese Language Proficiency Test (日本語能力試験), 2016
- Eighth Place (Individual Open Division), Internet Problem Solving Contest, 2016
- 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