

## PROFILE

I am a dedicated computer science student at Queen's University. I have broad experience in programming in many languages, on many platforms, much of it developed through personal projects. I am a problem solver and love to understand how things work. I am self motivated and love challenging projects. I am looking for a position that will challenge me and provide opportunities to extend my current skillset.

## EDUCATION

*Bachelor of Computing, Software Design specialization*  
Queen's University, Kingston, ON,  
Expected graduation in 2014

## COMPUTER SKILLS

*Languages:* Python, C#, Javascript, Java, Objective-C, C++, Ruby  
*General skills:* Programming, Git, QA, Automation, etc.  
*Comfortable on:* Unix (Arch, Debian, Ubuntu), OSX, Windows

## EXPERIENCE

*Client App Developer Internship* May - Dec 2012, Apr - Sept 2013  
Avaya Inc., 425 Legget Drive, Ottawa, ON, K2K 2W2

- Developed a framework for easily automating test cases and generating graphical reports for both iPad and desktop applications.
- Tweaked code in Avaya's iPad Flare app to increase the accuracy of automated testing.
- Skills: Python, Javascript, Objective-C, SIP.

*Game Programmer* Jan 2013 - Mar 2013  
Ravenous Games, Kingston, ON

- Developed a game called Gravity Duck for iOS in Objective-C.
- Successful release with an average rating of 4.5/5 stars and over 500 reviews.
- Skills: Objective-C, Game Design.

*Direct Connect Hub Developer and Administrator* Sept 2010 - Jan 2013  
Queen's University, 99 University Ave, Kingston, ON, K7L 3N6

- Developed and deployed the Direct Connect hub and accompanying website at Queen's University.
- Interviewed and hired volunteers to help manage hundreds of users.
- Skills: Lua, NMDC/ADC protocol, networking.

*Computer Science Teaching Assistant* Jan 2011 - May 2011  
Queen's University, 99 University Ave, Kingston, ON, K7L 3N6

- Taught lectures and helped students in the lab and via email.
- Responsible for administering tests and marking assignments.
- Skills: Python, communication and presentation skills.

*Technical Support* Sept 2009 - May 2010  
Queen's University, 99 University Ave, Kingston, ON, K7L 3N6

- Performed general troubleshooting duties for all computers within the AMS.
- Built, set up and distributed workstations to offices.
- Skills: Troubleshooting, networking.

## **PERSONAL PROJECTS**

All projects below (and more) available on GitHub: <https://github.com/pR0Ps>

### *Personal website*

- Built using Pelican (a static site generator) with a custom-designed template.
- Automatically regenerates when new content is published.
- Live at <http://cmetcalfe.ca>

### *Qcumber*

- A course calendar viewer for Queen's University written in Python.
- Gathers course information from the official site and displays it in a more pleasing manner, integrating extra features such as links to past exams, textbooks, etc.
- 25,000 unique visitors, and over 500,000 page views in its lifetime.
- Part of a 3-person core team.
- Live at <http://qcumber.ca>

### *Hexciter*

- A unique puzzle/arcade game about matching hexagons written in C#.
- Cross-platform (Android, iOS, Windows, Mac, Linux).
- Part of a 2-person team.
- Live on Google Play or at <http://broxxar.itch.io/hexciter>

### *ParticleStorm*

- A colorful, fast-paced action game of manipulating gravity to destroy waves of incoming enemies.
- Drop particles, then manipulate gravity to smash them into enemies.
- Developed in C++ using OpenGL.

### *LocationShare*

- An Android application to share or save the current location.
- Minimal permissions (just GPS).
- Lightweight (under 100kb).

### *NetChatLink*

- A chat channel linking bot coded in Delphi.
- Links messages across multiple chat protocols (ADC, NMDC, IRC).
- Controlled via an admin console or text commands.

## **EXTRA-CURRICULAR ACTIVITIES**

Hack Nights 2013-2014  
Network Security Analysis Club 2013  
Queen's Game Development Club Executive 2011, 2013  
COMPSA Web Chair 2012  
COMPSA Site Services Project Manager 2012  
DECA U Director of IT 2012  
Queen's Plug-and-Play Whitehat Network Executive 2010

## **REFERENCES**

Available upon request