107 Holmwood Avenue, Ottawa, ON luka.lawford@gmail.com 613-858-8125

## **Queen's University**

Bachelor of Science in Computer Engineering, 2<sup>nd</sup> year

• GPA: 3.9 (4.3 scale)

#### **Technical Skills**

- Experience programming in C, C++, Visual Basic, MATLAB, VHDL, HTML/CSS
- Experience in Adobe Photoshop, Flash and Illustrator, Microsoft Office and VBA for Excel
- Strong English skills; drafted six novels for National Novel Writing Month events; created and proofread engineering presentations and reports for CCI and Queen's University Engineering Practice courses

### **Employment**

Student Engineer, Communication Components Inc.

May 2015 - August 2015

- Processed regular near-field scans of antenna prototypes, and converted antenna pattern data files between multiple industry standard formats
- Created, proofread, and formatted product data sheets, pattern plots, and product images for CCI's updated website
- Wrote a Visual Basic application to create Scalable Vector Graphics (.SVG) files from antenna pattern text files, used to create web-quality images for CCI's updated website
- Assisted in updating and fixing bugs in CCI's antenna pattern creation application

#### Educational Assistant, Glebe Kumon Centre

May 2013 - August 2014

- Tutored students aged 3-16 in mathematics and English
- Interviewed, and administered placement tests for, children of potential clients
- Performed data entry and trained new employees to use Kumon's grading software

# **Projects**

CCEyeball, created for CCI, 2015

Converts antenna pattern plots to .SVG graphics

- Accepts up to 20 antenna beam patterns in common industry formats
- Generates a vectorized path made of the 360 data points on a graph scaled to user's preference
- Each individual beam's pattern may be rotated, recoloured, scaled, renamed or hidden

1-52, created for Engineering Practice at Queen's, 2015

Card game for Android accessible to the visually impaired

- Redesigned cards to be more easily distinguishable by the near-sighted and colourblind
- Assigned IDs to each card from which the suit, value and image can be retrieved in a simple operation
- Included accessibility features such as sound cues and simple tap and swipe inputs