BRENDAN HOLMES

📞 647-331-9473
✉ beholmes@uwaterloo.ca
🏠 beholmes.com
github.com/brendanholmes

SKILLS

Embedded computer systems:
- Proficient in C/C++, VHDL
- Familiar with Java, C#, JavaScript, System C, Verilog, MIPS and ARM assembly
- Windows, Linux, Android, real-time custom operating systems
- Eclipse, Altera Quartus, ModelSim, Microsoft Visual Studio

Image processing:
- Proficient in MATLAB programming
- Knowledge of image enhancement using filters
- Edge detection and image segmentation

Digital hardware design:
- FPGA design using VHDL and Verilog
- Performance and area optimisation, data flow diagram design and pipelining, state machine design and optimisation, using Altera Quartus, ModelSim and Precision RTL

Web development:
- Familiar with HTML5, CSS3, JavaScript, JQuery
- Embedded software, mobile web applications, object-oriented programming, storyboarding and requirements analysis

Electronics:
- Op-amp and transistor circuits, RLC circuits, oscilloscopes, electromagnetism and radio-frequencies, materials design with CES software
- Circuit modelling and analysis with LTSPice

Project management:
- Version control, documentation, flow charts, verification and validation
- Task management and team communication

EDUCATION

University of Waterloo, Waterloo ON, Canada   *Jan 2017 – Apr 2017*
- Exchange program for electrical and computer systems

Monash University, Melbourne VIC, Australia   *Mar 2015 – Nov 2018*
- Candidate for Bachelor of Engineering (Electrical and Computer Systems), Honours

University of Melbourne, Melbourne VIC   *Mar 2010 – Nov 2013*
- Bachelor of Arts (Media and Communications)

PROJECTS

Multicore compression-decoder embedded system (2017) 🔗 beholmes.com/#projects/

Superpixel algorithm based on k-means clustering implementation (2017) 🔗 beholmes.com/superpixel/main.html

Performance and area optimized Kirsch edge detector in hardware (2017) 🔗 beholmes.com/#projects

Run tracker mobile web application for Android (2015) 🔗 beholmes.com/projects/run-tracker/index.html

BRENDAN
HOLMES

📞 647-331-9473
✉ beholmes@uwaterloo.ca
🏠 beholmes.com
○ github.com/brendanholmes

WORK EXPERIENCE

Student welfare officer - Monash Student Association, Melbourne VIC, Australia   Dec *2015 – Dec 2016*
- Managed a portfolio of student services and advocacy campaigns
- Worked with Monash University administration to deliver lighting installation for student safety
- Worked with volunteers and suppliers to deliver over 5,000 main meals at a unit price of under a dollar
- Reported to and voted at Monash Student Council meetings to decide on direction of the organization

Flow monitoring technician - American Digital Systems, Melbourne VIC, Australia   *Aug 2014 - Mar 2016*
- Installed and tested sensors for underground water system flow monitoring
- Disassembled hardware and tested batteries
- Managed the warehouse and ordered stock
- Working within Occupational Health and Safety regulations

Journalist assistant - Channel Nine News, Melbourne VIC, Australia   *Aug 2013 - Sep 2013*
- Assistant to the state political reporter
- Researched stories, drafted content
- Conducted vox-pop interviews
- Attended press conferences and expert interviews

Producer and reporter - SYN Radio, Melbourne VIC, Australia   *May 2013 - July 2013*
- Reported for current affairs program, *Panorama*
- Pitched story ideas, produced packages, presented on air
- Audio editing using Adobe Audition and Audacity