1751 Paddock Dr, Unit 2
Coquitlam BC V3E 3M2

ASHLEY LESPERANCE

(604) 897-4791
ashrles@gmail.com

EMPLOYMENT

Localization Developer, Intern **BlackBerry Ltd.** **September 2014 – August 2015**
Mississauga, ON

- Developed and maintained cross platform tools using primarily Python for internal and external use.
- Worked with a variety of Localization and Internationalization frameworks, including Qt, iOS, Android, and developed conversion, alignment and other tools as needed.
- Automated testing across numerous devices and operating systems, using Robot and other tools.
- Maintained and monitored tools that detected bugs for various teams to improve translation quality.
- Debugged localization and internationalization bugs in BlackBerry 10 and Android using C++ and Java.
- Documented and promoted good localization practices using automation and various other tools.

EDUCATION

Burnaby, BC **Simon Fraser University (SFU)** **September 2010 – August 2016**

- BASc in Computer Engineering with Minor in Computer Science, August 2016.
- Undergraduate Coursework: Real Time and Embedded Systems; Control Systems; Digital and VLSI Systems Design; Communication Systems; Operating Systems; Databases; Algorithms; Compilers; Calculus III; AI.

PROJECTS

- **Decaf Compiler** (SFU – 2016)
  - Designed and developed the compiler for Decaf, a C-like language for Compiler Design coursework.
  - Using Flex and YACC for lexical analysis and expressing the context free grammar, an abstract syntax tree and symbol table was built in C++ and intermediate code generated using the LLVM API.
- **Portable Rehabilitation Gait Analyzer** (SFU – 2015)
  - Lead programmer in project where custom insole with 64 pressure sensors was developed to help in rehabilitation of Gait related pathologies as part of the end of degree project.
  - Evaluated and implemented data compression methods for real-time communication over Bluetooth.
  - Developed and optimized a real-time pedobarograph for the Android app in Java.
  - The project was featured in the student innovation showcase and the findings will be presented at the IEEE-NIH 2016 conference.
- **Messaging Server** (2013)
  - Developed a messaging app using the client-server model to allow for communication between a BlackBerry 10 app written in JavaScript and an iPhone app in Objective-C through a PHP based server.
- **RCMP iPhone App** (SFU – 2013)
  - Developed an iPhone application in Objective-C that utilized the different capabilities, including GPS and camera, of the device to report crime as part of Software Engineering coursework.
  - Devised communication scheme between backend implemented in PHP and iPhone app using JSON.

ADDITIONAL EXPERIENCE AND AWARDS

- **Fishackathon 2016:** Developed Android app to capture data about ghost gear and transmit to a web app, developed using Flask and hosted on AWS, for display and analysis.
- **BlackBerry Innovation Day** (2015)**:** Developed an Android widget prototype in Java to pull in data from XML files as a foundation for contextually aware help prompts.
- **1st Prize IEEE First Year Competition** (SFU – 2011)**:** Prototyped an economically viable interactive presentation controller that would make use of existing infrastructure in institutions.

Languages and Technologies

- Python; C++; Java; Objective-C; JavaScript; XML; HTML; PHP; C; Assembly; Visual Basic; SQL; Ruby; Bash
- XCode; Git; Visual Studio; MS SQL Server; Eclipse; SVN; P4; Unix; CherryPy; Flask; MongoDB; Redis; AWS