Andrew DeChamplain Computer Systems Engineer

Address

6489 Empire Grove Street Greely, Ontario, Canada K4P 1G6 **E-Mail:** andrew.dechamplain@gmail.com

LinkedIn: ca.linkedin.com/in/andrewdechamplain

Supervisor: Prof. Victor C. Aitken

GitHub: github.com/AndrewDeChamplain

Website: andrewdechamplain.ca

Phone: (h): 613-821-0624 (c): 613-850-4207

SUMMARY

- Able to communicate, orally and written, in both English and French.
- Communicates and interacts effectively with other individuals, in both a stand-alone and team environment.
- Resourceful, dependable, punctual, and quick learning.
- Certified in Standard First Aid/CPR level 'C' and AED

COMPUTER PROFICIENCY

- Languages: C, C++, Java, Python, JavaScript, CSS, PHP, HTML, and SQL.
- Operating Systems: Windows and Linux (Ubuntu, Fedora, and Debian)

PROJECTS

Mobile Intelligence Perception System (MIPS)

For my fourth year project, I worked in a team of 4 to build a perception system that is built on a mobile remotely controlled 3 wheeled robot to be used in mapping environments that are too dangerous for humans. The project involves using a pre-existing 3 wheeled robot which we mounted a Microsoft Kinect on a servo which allows it to rotate and capture a 270° depth image of the room. Using MATLab, we stitch together multiple room scans and create a full depth image of the environment. We control the robot with a Java GUI that displays front and rear cameras for remote operation when the robot is no longer in view and the map is displayed on the GUI while it is being made.

Patient Monitor System

The project was a simplified patient monitoring system like one that would be used in a hospital. Four Raspberry Pi's and a laptop were used in the system. The Pi's were the patient/clients which had camera, heat rate sensors, heat sensor, and a panic button which sent all the data to the server. The laptop ran the server and Java GUI which displayed all the information the Pi's were sending. A single person could monitor all the patients and anytime a sensor returned information that the system considered to be too low or high, or if the panic button was pressed, it would alarm the GUI help would be on its way.

Course Selection Assistant

In a team of 2, we developed a web application that would build you a conflict free timetable based on the courses that you have completed and courses that you still required. The system had a MySQL database which had a table of all the profiles of users as well as a table for all the courses that Carleton offers with the course details. The application would build 5 different timetables which you could choose the one that you preferred. Then you would be asked to confirm your selection which would then register you in each of the courses and save your timetable to your profile for future viewing. A major challenge with this project was we were restricted from using any pre-existing libraries such as jquery.

EDUCATION

Carleton University

Candidate for Bachelor of Engineering in Computer Systems Engineering

Ottawa, ON: 2011/09 - present

- Currently completing my last semester and will be graduating in December, 2015.
- Past VP of Finance for the Carleton Software and Computer Engineering Society (SCESoc).
- Student athlete on the Cross Country and Track and Field team.

WORK EXPERIENCE

Skywave Mobile Communications

Software Developer

Ottawa, ON: 05/2014 - 08/2014

- Developed and implemented the back end of a web application that would set/get the configurations of the mobile satellite terminals that Skywave produces.
- Created state machines for each function of the application to ease implementation and create meaningful documentation for non-technical personnel.
- Worked in a scrum environment where agile techniques were used to manage and develop the project.

MyPlanet Internet Solutions Inc.

Fellowship 10 Day Program

Ottawa, ON: 04/2014

- Worked as a member of a self-sufficient scrum team of 4 learning and collaborating using agile thinking under the guidance of mentors from MyPlanet.
- Spent 7 days developing a solution to a problem where we had to analyze the problem, communicate our ideas and adapt our solution as we progressed.
- Of over 200 applicants, I was 1 of 25 chosen for the mentorship.

Software and Computer Engineering Society

VP Finance

Ottawa, ON: 04/2013 - 04/2014

- Created the budget for all society events for the 2013-2014 school year.
- Raised over \$2500 to pay for social events for the society.
- Reimburse the cost of registration and bussing to the Canadian Universities Software Engineering Conference (CUSEC) in 2014 in Montreal for all Carleton students who attended.

ACTIVITIES AND INTERESTS

- Competitive triathlete at the Olympic and sprint distances.
- Volunteer with running, cycling, and triathlon related events in my city when I am not participating.
- Passion for innovative tech and video games.