Tuesday, January 21, 2014

Elizabeth Croft/Mike Van der Loos
UBC CARIS Lab
Vancouver, BC

Re: Gaming Controller for Rehabilitation Therapy

Dear Dr. Croft and Dr. Van der Loos,

I am motivated to be studying Cognitive Systems because I believe that computer science is most powerful when applied to other domains. I strive to utilize my computing skills in order to develop programs that will improve the quality of life of others, whether through cognition or health. Through my classes, I have fostered a great interest in both human-computer interaction, as well as robotics. I am currrently taking EECE 418, Human-Computer Interfaces, and have previously taken several courses concerning Artificial Intelligence (CPSC 322, COGS 300, CPSC 312). What truly excites me about this field is how dynamic it is. Because this ever-changing nature requires constant adaptation and adjustment, it demands a striving beyond adequacy, and inherently, fosters growth and progress. I aspire to be a part of your team for this very reason. Nothing excites me more than the opportunity to challenge preconceptions and reach beyond all that I currently know to be, and to work at a research lab at the forefront of this movement.

I am currently a Software Lead of the Biomedical Engineering Student Team, a 30-person team developing an assistive motion technology for peripheral neuropathy patients who have lost feeling in their feet. This position has demanded extensive research in the area of peripheral neuropathy patients, a thorough design period isolating constraints and requirements, coordination among my team, and executing the software development in C.

I have already completed two previous co-op work terms at Appnovation Technologies, where I effectively contributed to two of the largest high-profile projects the company had ever put out, working primarily with the Drupal Open Source Stack, PHP, and interfacing with MySQL. Recently, I participated in a 48-hour Think Global, Hack Local Community Hackathon. My 12-person team worked with community partner Neil Squire Society and created a Speech-Assisted Math Game, written in Java, aimed towards children with disabilities and literacy and numeracy difficulties. My contribution to the project was in leading the team in an Agile-y/scrum-like software development process, to ensure completion and delivery by the end of the 48 hour time period, and in developing the UI for the game menu, utilizing the Swing library, which I had to learn quickly over the course of the hackathon. Other projects I have completed include a web-based cognitive assessment memory task game written using JavaScript (JQuery) and themed with HTML5 and CSS, a Clue board game assistant Intelligent Agent written in Prolog utilizing dynamic databases, and a mapping mobile application for Android phones in Java. In my spare time, I try to further my learning by taking online courses in Python.

My background in music and the performing arts has honed my creativity, innovation, and improvisation when things don't go necessarily as planned. I am a keen, quick learner, who works well in a team environment. My positive and friendly approach, as well as my social skills will be highly useful to this position. I have experience organizing events/campaigns across a number of schools/organizations.

Included in this application is my resume for your perusal. I am very interested in being a member of your dynamic team and would be very glad to come for an interview to personally introduce myself to you. I can be contacted through the UBC Science Co-op office. I look forward to meeting you.

Sincerely yours,
Tricia Jose