Triton June 12, 2015

Velocity Foundry 45 Water Street South Kitchener, ON

Dear Hiring Manager,

I am an engineer and an athlete interested in working at Triton. I'm excited about using technology to improve sports performance, training and coaching, areas where Triton wants to make a difference. I have the technical skills to excel either as an IOS Developer or as a Digital Signal Processing Guru. As an athlete, I believe that technology has the potential to transform training and coaching; I want to be part of that transition.

For the past two years, I've been a graduate student at the University of Waterloo building 3-D simulations of the golf swing for use in designing golf clubs. The simulations were built using MapleSim and Matlab. In this role, I worked independently to gather experimental data on the golf swing using electromyography, IMUs (MVN suit), and video motion capture systems. The experimental measurements were digitally processed to determine useful features for comparing to simulated swings. The resulting model was presented at the International Sports Engineering Association conference in Sheffield and was delivered to an industry partner.

I had many opportunities as part of the coop program at the University of Waterloo to design, develop, and distribute software. At Apple Inc. (2 internships) I designed and developed an internal application for testing location algorithms that included iOS, OS X, and server-side components using Cocoa, Objective-C, C++, and Python. This application was selected from all of the intern projects to be presented to Senior VP Scott Forstall at the end of my first term at Apple. While it was not intended to be released to the public, the application was included with internal builds of iOS and I used it to help develop a new Kalman Filter based algorithm for determining device locations.

My other co-op terms also gave me opportunities to design and develop software projects, including sports related work. I spent 8 months working on statistics software for basketball coaches at CREZ where I worked on developing the client-side of a platform for live-streaming basketball game stats. As the sole client developer, I fixed bugs, wrote new features using C#, delivered installer packages, and supported customers directly. I enjoyed working with basketball coaches to determine what they needed from our software and then creating those features for them.

On my own, I've built a few smaller projects which can be found on my website at http://ddajohnson.com/projects.

I'm excited by the chance to work in a dynamic, startup work environment on a product that will help athletes improve their performance. Helping athletes and coaches excel is exactly where I want to apply my technical skills. I hope to hear from you soon.

Sincerely yours,

Daniel Johnson