

**HR Manager**  
*Kerberos Productions*

February 20, 2017

Dear Sir or Madam,

I feel that my skills and experience would make me an ideal candidate for the AI programmer position advertised. I am a skilled C++ programmer with experience in animation, rendering and game development. I completed my undergrad with a specialty in embedded systems. This gives me considerable more familiarity with hardware architectures, data structures and operating systems than most other developers. Additionally I completed a masters of applied science with a focus on hardware security during which I worked closely with multi-processor systems, embedded platform development, Java, and C++.

I am familiar with developing for Unity 5 with C# and am currently taking the Udemy Unreal Engine Developer Course (C++). This course has made me intimately familiar with the Unreal engine and its API.

I worked closely with Dr. Brian Wyvill at the University of Victoria whose research is focused on animation. We worked with C++, OpenGL 3, QT and the Boost library. Since he taught me the 12 principles of animation, I see their application in both film and games. It is my ambition to become a part of this industry.

During my time with Dr. Wyvill I was introduced to more complex simulation techniques. Using Lagrangian mechanics, quaternions and spline paths I created a globular physics simulation. I imported a fountain object and had it spray out droplets of a liquid. These droplets were subject to attraction and repulsion forces. Tweaking the values could modify the behavior to look like water, putty, even powder. I have made videos demonstrating these projects which you can see on my website. Additionally I am currently completing an online course through the Udemy training website on the Unreal engine. This course contains over 50 hours of instruction and has made me extremely comfortable developing with Unreal.

I have excellent personal skills. I am an experienced team leader, a natural independent thinker, and a concise communicator. I believe that I will make a strong candidate for this position; I wish to help Kerberos Productions create breathtaking games and visual experiences. Thank you for your time and consideration.

Yours faithfully,

**Nick Houghton**

*Attached: curriculum vitae*

**Nick Houghton**  
2446 Sinclair rd – V8N1B3 Victoria – Canada  
☎ +1 (250) 893 1988 • ✉ [nhoughto5@gmail.com](mailto:nhoughto5@gmail.com)  
🌐 [www.nickhoughton.ca](http://www.nickhoughton.ca)