HR Manager March 14, 2017

Nickelodeon

Dear Sir or Madam,

I feel that my skills and experience would make me an ideal candidate for the summer intern position in either the Animation Creative Lab or with the Game Engineering and Development team.

I am a skilled C++ and developer with experience in animation, rendering and game development. I am familiar with Unreal Engine 4, OpenGL and the DirectX API. I have a serious passion for computer graphics and game engine design. I have made several games and physical system animations in my own personal projects.

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 the Unreal engine.

I have excellent personal skills. I am an experienced team leader, a natural independent thinker, and a concise communicator. I believe that I would be a valuable asset to the Nickelodeon team. Thank you for your time and consideration.

Yours faithfully,

## **Nick Houghton**

Attached: curriculum vitæ

**Nick Houghton**