Dear Nvidia,

I am writing to apply for the Deep Learning Intern at Nvidia. I am a 3rd year Computer Science student studying at the University of Toronto, with 6+ years of experience in software design, development and engineering, and a deep passion for video game technologies, problem solving, and innovation to offer for the company.

Nvidia has been my companion ever since I discovered my childhood passion for graphics-intensive games. GeForce cards have been the only dedicated graphics card I use. I enjoy artificial reality, and I spent countless hours tuning graphics plugins and writing my own shaders. Furthermore, the field of artificial intelligence and machine learning excites me just as much. It is my dream to join and experience the one field that I can feel constant pleasure working in: a combination of game technologies and deep learning.

I have the following skills that would make me suitable for the position at Nvidia:

- Theoretical and practical knowledge in machine learning, from courses in neural networks, artificial intelligence, natural language processing, and image processing, as well as from projects such as style-transfer demo, and neuro-evolution demo.
  I gained knowledge in a variety of techniques and sub-areas of machine learning, such as object recognition, LSTM, CNN, GAN, attention model, neural machine translation, policy gradient, Q-learning, and more;

- Deep innate passion for simulated realities, and knowledge in game-related technologies such as procedural generation, rendering pipeline, optimizations, and AI techniques;
  I have made 10+ personal games, using tools ranging from frameworks like OpenFL, Haxe, SFML and Phaser.js, to industrial-grade engines like Unity 3D and CryEngine;
  I am the co-president of the UofT Game Design and Development Club, and winner of the 1st-overall best game and technical achievement award in the annual game-making competition;

- Industrial experience with software engineering methods and best practices from my internship at Google, where I developed and deployed a complete Google Docs feature to production, including design documentation and planning.

- Proficiency in numerous programming languages, tools and frameworks including but not limited to C/C++, Python, Java, TensorFlow, PyTorch, Unity 3D, which would help development for technology in Games, VR and Education applications;

I am delighted to be considered for this opportunity, and I look forward to contributing my talent and experience to Nvidia. Please feel free to schedule meetings or interview with me to discuss in detail. Thank you for your time.

Sincerely,

Ze Ming (Tommy) Xiang