Statement of Purpose

Christopher Duarte

One of my interests, since I was a child, has been playing video games. Not just for the engaging stories and experiences they offer, although that has been a large part of it. Mostly, I have been fascinated in the process of developing games and the techniques utilized in generating the worlds present in such games. As I've grown up, I've seen how the industry has broken technological boundaries in terms of creating bigger and better worlds while at the same time relying upon tried and true techniques found in previous entries. One of the most recent advancements made has been the implementation of Machine Learning Algorithms to better render the fascinating worlds that game developers create.

The classes that I have taken throughout my undergraduate career have provided me a starting point from which to further my studies in Machine Learning and Artificial Intelligence, which I would like to follow up on throughout my graduate career. I've utilized many modern techniques found in both topics as an undergraduate in relation to Big Data, but would like to learn how such techniques may be used towards modern graphics rendering.

My desire to study Computer Science in my undergraduate career and futher it through PhD studies originates from wanting to contribute to the building blocks of modern game development and further advance techniques utilized in the field relating to Machine Learning and Artificial Intelligence. I believe that the Department of Computer Science at UM is well suited in allowing me to pursue this goal due to the various fields that the department utilizes Machine Learning and Artificial Intelligence. These range from Neuroscience, Big Data, and Computer Graphics.

As a result, I seek to apply as a PhD candidate for Computer Science at the University of Miami.