

# COMPUTER GRAPHICS



## Kieran Carnegie

Masters in Computer Science

Kieran begun with an undergraduate majoring in both Computer Science and Physics, and after taking a graphics course as part of compsci he realized that Computer Graphics was an ideal combination of the programming and math expertise he had gained from each half of his undergrad. "I've always tried a bunch of things and continued with whatever seemed interesting at the time and Graphics is by far the most interesting and fun work I have ever done, both on and off campus", Kieran says.

Kieran's research explores how people react to Virtual Reality and how this can be used to make VR applications more enjoyable, immersive and lifelike. He has been working with the Oculus Rift headset, exploring a novel idea about what causes motion sickness and how to reduce it.

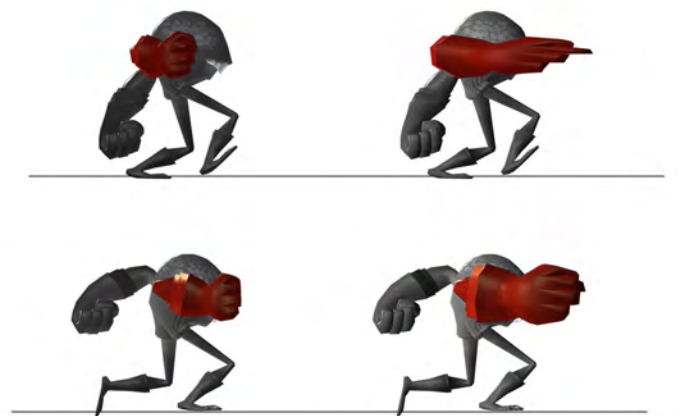


## Richard Roberts

PhD in Computer Science and Design

Beginning his undergrad studies with a focus on interaction for gaming, Richard used programming languages like Python and C++ to develop his projects. These skills quickly lead to an internship at Weta Digital. There he developed the first prototype of a system that helped in the production of the movies Rise of the Planet of the Apes and Tintin. Richard is now applying knowledge gained in his internship to his graduate research in computer science.

His research explores computational tools to produce stylized animation. As part of this, he published a novel technique to produce the "squash & stretch" effect in cartoon animation. Richard's algorithm allows the artist to specify a desired squash or stretch effect. The deformation is then applied automatically whenever the animation of the object or character has a similar "state", thus avoiding the need to repetitively keyframe its appearance.



"My experience with my fellow students and the staff at Victoria University provided the direction I needed to give substance to my projects, as well as the motivation required. During my studies I have created a strong passion for the digital realm, one which I hope to now share with those following a similar path as a tutor and post-graduate."

