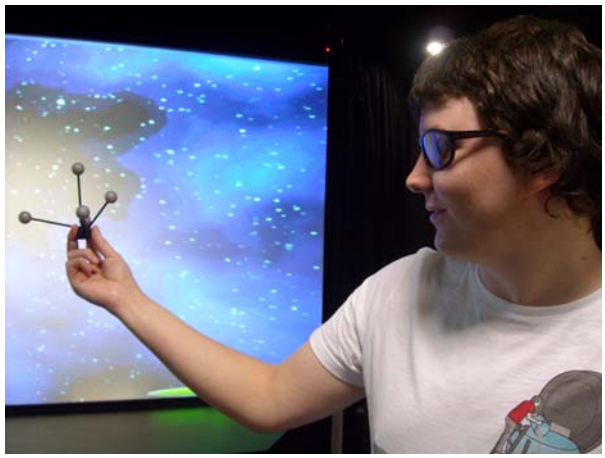
James Riggall, Human Interface Technology Laboratory, UTAS

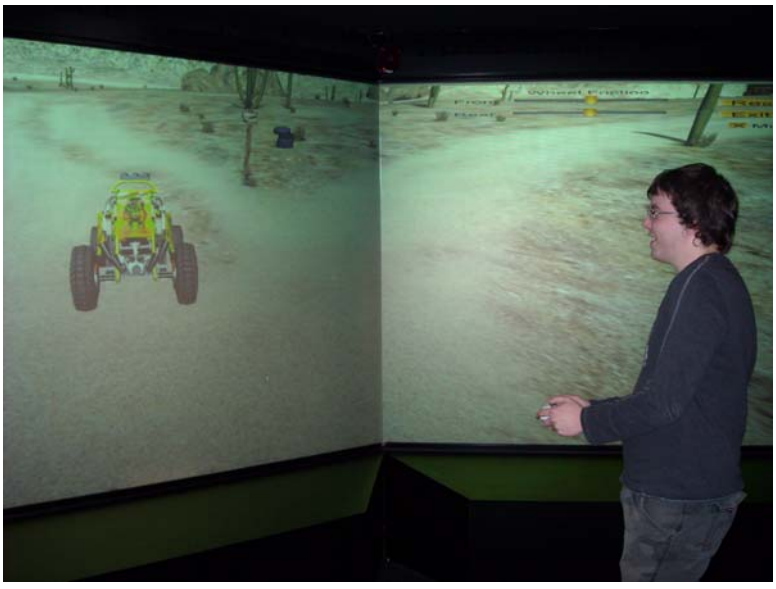
Virtual Worlds…

While I currently work as a computer scientist, my greatest interest has always been the creative arts, how to tell a good story, how to engage people, how to elicit an emotional response through something that you have created. My dream as a child was to be a writer. However, this changed when my parents bought me my first computer and I discovered computer games. I quickly realised that computer games had the potential to be even more immersive and more powerful than other forms of entertainment. I was excited by the power of the medium to involve people in content, to make them present in a story.



After this, my career goals subtly changed. I still wanted to be a writer, but now I wanted to write for computer games, to build worlds rather than just stories; worlds in which players can shape their own narratives by interacting with the world and one another. I decided that an arts degree would be a good first step, as I had read that game design companies value well-rounded writers with broad knowledge of fields such as English, history and philosophy.

In the year I chose to start my arts degree I read an article about a brand new human interface technology (HIT) lab opening at UTAS in Launceston. The lab would be looking at the way people use computers, how to make them more intuitive and how to create more immersive content. Given that this had the potential to help me towards my goal of becoming a game designer, I enrolled in the two first year units that were available.



Over the course of the two introductory units, I came to realise that while computer games were still my passion and this was the industry in which I ultimately wanted to work, there was huge scope for other interesting work within the interface technology field. I realised that immersive virtual worlds can be used for a vast array of different purposes. They can of course be used for education and communication, but the uses certainly don't end there.

For example, there is interesting research being done into the use of virtual worlds as an alternative to anaesthesia. Researchers have found that children who are immersed in a virtual reality computer game feel almost no pain in the real world, enabling doctors to perform surgery on young patients who are allergic to drugs such as morphine. In fact, some of these studies suggest that not only is virtual reality entertainment a viable alternative to medication, but in many cases it is more effective at alleviating pain.

The first HITLab course I attended was three years ago. Since then I have been continuously involved with the HITLab in a variety of roles. In the past three years I have been a student, tutor, researcher and technical support person with the lab. My current research involves developing computer applications with the potential to improve the way we teach university level units, particularly by providing more interactive and immersive online content.

I am on schedule to finish my arts degree at the end of first semester next year. From there, I hope study in the HITLab full time, first as an honours student and then later as a PHD researcher. In the meantime I will be continuing to tutor first year HITLab classes, work on my own research, and help out with other projects that are happening around the lab.

Find out more about the HITLab at www.hitlab.utas.edu.au