

# Ryan Sumner

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## Personal profile

With a strong BSc in Computer Science, followed by a Master's degree from Victoria University of Wellington in Computer Graphics which was developed in close collaboration with Wellington's internationally recognised entertainment and digital technology sectors (such as Weta Digital). Currently looking for a position in the game or film industry where I can contribute the full range of my technical skillset from both a design and computer science background and my excellent communication and soft skills attained from tutoring experience.

## Education

- Mar 2014 - Jan 2017     **Master of Science (MSc) in Computer Graphics (with Merit)**  
*Victoria University of Wellington*  
**Grades:** Thesis in Computer Graphics – (B+), Computer Graphics Interaction Design – (A), Computer Graphics Rendering – (B-), 3D Modelling in Computer Graphics – (B), Maths for Games & Graphics – (B+), Programming for Graphics – (B+), Computer Graphics for Film – (A+).
- Mar 2013 - Nov 2013     **Master of Science Prerequisites**  
*Victoria University of Wellington*  
**Grades:** Algorithms and Data Structures – (A-), Introduction to Computer Graphics – (B-), Computer Game Development – (B), Design Visualisation – (B-), 3D Modelling and Animation – (B), Postproduction & Special Effects – (A-).
- Feb 2010 - Nov 2012     **Bachelor of Science (BSc) - Major in Computer Science**  
*Massey University, Albany Campus*  
**Final year grades:** Database Development – (B-), Artificial Intelligence – (B+), Algorithms and Languages – (B+), Computer Networks – (A), Concurrent Programming and Operating Systems – (A-), Application Software Development – (A).
- Jul 2008 – Nov 2009     **Pinehurst School, Albany, North Shore City, New Zealand**  
**IGCSE Exam results November 2008:** Biology – (B), Mathematics – (A), Information Technology – (B), Chemistry – (A), First Language English – (A), Physics – (A), Literature – (B)  
**AS Exam results November 2009:** Biology – (C), Chemistry – (C), English Language – (A), Mathematics – (B), General Paper – (A).
- Sep 2003 – Jun 2008     **Victoria College, Jersey, Channel Islands**  
**GCSE Exam results June 2008:** Biology – (A\*), Chemistry – (A\*), Physics – (A\*), Mathematics – (A\*), Religious Studies – (A), Drama – (B), French – (B), English – (A), English Literature – (B), Media Studies – (B), Geography – (A).

## Key Skills and Experience

### Technical Skills

- Experienced in the following programming languages: C, C++, C#, Java, Python, OpenGL.
- Some experience with PHP and SQL.

- Knowledgeable in the use of industry standard game engines and software tools such as Unity3D, Unreal Engine 4, Maya and Houdini.
- Experienced in Designing and Modeling 3D assets in Maya
- Experienced in making games in Unity3D
- Experienced in Group Development
- Researched and conducted user studies for Virtual Reality as part of Master's Thesis.

## **Communication & Soft Skills**

- Oral - Exceptional communication skills developed through many years of academic teamwork, paid employment delivering presentations and tutorials to other students and interfacing with the general public during university open days.
- Written - Strong professional written skills developed throughout many years of tertiary education and honed more recently via the completion of a Master's Thesis.

## **Relevant Experience**

Mar 2016 -  
Jun 2016  
&

Mar 2017 -  
Jun 2017

### **Victoria University: Tutor for "Advanced Game Development" (300 Level Paper)**

- Preparation and delivery of tutorials involving the Unity3D game engine.
- Provision of advice and technical assistance to students in completion of assignments and examinations.

Jul 2016 –  
Nov 2016

### **Victoria University: Tutor for "Introduction to Computer Graphics" (100 Level Paper)**

- Supervision of assignment sessions involving the processing language.
- Marked assignments, tests and exams.
- Invigilated a midterm test.

### **Victoria University: Thesis**

- Completed a Masters thesis entitled: "The Impact of Dynamic Convergence on the Human Visual System in Head Mounted Displays". This postgraduate research work involved extensive research into the replication of human eye rotation for Head Mounted Displays to help users view very close virtual objects without any difficulty. Transferable skills obtained include:
  - Academic research techniques, interpersonal communication, data collection, analysis synthesis, conceptualisation and critical thinking along with effective report writing and time management.

## **Other Experience**

Oct 2007 –  
Nov 2007

### **Jersey Dairy (Jersey, Channel Islands): Project Trident (3 Week, Work Experience Project) as a Laboratory Assistant**

- Worked as part of a team in a dairy laboratory operating specialist test equipment under supervision and alone. Activities included selecting milk and dairy product samples and conducting chemical, physical and microbiological investigations at various production stages, following analysis evaluating and documenting the results. Escalating any anomalies to the supervisor immediately.
- Delivering a number of presentations and demonstrations. Two of which were to Weta Digital technical staff that illustrated:
  - A system that spread a fire-like effect across a mesh. This was for a group graphics project that was part of the 400 level paper "Programming for

Graphics”.

- Replicating the human eye rotation, called convergence, for Head Mounted Displays. This part of the research I was conducting for my Master’s Thesis.
- Experience gained in working with the general public examples include:
  - Representing the Design and Graphics School at Victoria University’s Open days (August 2015 & 2016). Listening to the studying objectives and career aspirations of young students and parents and discussing the options provided by Victoria University.
  - Aided a retail business (Pulsar Max) at Armageddon convention (October 2015). Cash management, promotion and product sales along with product demonstrations and liaison with gaming enthusiasts on a very busy exhibition stand.

## Interests

- Virtual reality, game development, programming, video games, anime, board games, card games.

## Personal Information

**Nationality:** British  
**Place of Birth:** Shrewsbury, Shropshire, UK  
**Date of birth:** 04/11/1991  
**Immigration Status:** Permanent Resident

## References

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