

Human Interface Technology Laboratory New Zealand

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January 30th 2013

Reference for Samuel Williams

To Whom It May Concern:

This letter is to support Sam Williams in his application for a position at Google. I am the Director of the Human Interface Technology Laboratory New Zealand (HIT Lab NZ), a research institute at the University of Canterbury focusing on next generation computer interfaces. The HIT Lab NZ has over 50 staff and students and is internationally known for its work in Augmented Reality, Visualization, Next Generation Collaboration, and similar research areas (see <http://www.hitlabnz.org/>). I am also a full Professor at the University of Canterbury and teach classes in Computer Science and other subject areas.

Sam is completing a Master's Degree in Computer Science under my co-supervision and he is completing his thesis research at the HIT Lab NZ. In selecting Sam as a Master's student we were looking for a highly motivated and talented student to work on a project to develop an improved tracking system for outdoor Augmented Reality. Sam not only had excellent grades, but also showed great enthusiasm and willingness to work on a challenging research project, and so he was a natural fit for the project.

Sam has been working on his Master's thesis for over a year now, and during this time he has shown himself to be a very talented developer and able to master complex topics in computer vision, computer graphics, Augmented Reality and iOS development. I have been very impressed in how quickly he learned to work independently and come up with solutions to the research problems he faced.

Sam has shown himself to be a dedicated and motivated researcher. He is capable of reading and understanding related work, and then implementing relevant algorithms and building upon the existing material. He works very well on his own and in a team with other researchers. He is able to work with minimal guidance but also knows exactly when to ask questions. This showed that he is a very capable student but is also aware of his limits and is not afraid of asking for help.

In addition to his thesis work he always seems to have several side projects he is working on that show his diverse interests and excellent programming skills.

Currently he is working on an interesting game for the Mac platform, and in the past I have been impressed with his software for non-photorealistic rendering. In one of the classes that I taught him in, he was able to develop a mobile Augmented Reality solution based on his own game engine in just a few weeks, a task that would take most normal programmers months to do.

Sam has also impressed me his entrepreneurial efforts. He has been involved in one of the HIT Lab NZ start-up companies and also has another company of his own that he has been running, selling Mac applications and other software services. He has been active in organizing intensive programming weekends and involved in the local start-up scene. This has given Sam a great knowledge about how to develop commercial ready software, and has taught him skills around communication, project management and leadership.

On a personal level Samuel is very studious and attentive, and demonstrates excellent communication skills, oral and written. He is an extrovert and well liked by everyone at the HIT Lab NZ. He integrated well into the HIT Lab NZ, and it is a pleasure to supervise his work. I can truly recommend him for a position at Google. He is one of the most talented students we have and would be an asset to the organization.

If you would like more information, or the work he was involved, please email me at: mark.billinghurst@hitlabnz.org

Sincerely

A handwritten signature in black ink, reading "M Billinghurst". The "M" is large and stylized, followed by the name "Billinghurst" in a cursive script.

Mark Billinghurst
Director, HIT Lab NZ
University of Canterbury