

The Department of Computer Science

Tobi Vaudrey

After completing an engineering degree in 2005, Tobi has launched into a PhD in Computer Science. He wants to create a “sound world” to help blind people see.

“My thesis title is “Eyes for Cars”. I’m developing algorithms to analyse 3-D motion and the position of objects in a scene. The aim is to develop dynamic vision for cars, through vision-based driver assistance systems.

I hope to continue my research in computer vision, and apply that to develop vision systems for blind people. Eventually I’d like to start a company that develops this sort of technology—as in navigation aids, reading aids, recognition aids and so on.

I’ve been at Tamaki campus for my post-graduate studies and really enjoy it there—it’s quiet, easy to get to and not so crowded. You can form close relationships with your colleagues as we’re all working on the same project which gives us experience in collaborative research.

I have had many high points during my studies. Firstly, in 2007, I was able to spend six months in Germany, working at Daimler (Mercedes Benz). This was to get me up to speed on computer vision. I was working with leading experts in the field, which was a very humbling experience. When I came back, I was interviewed on “Campbell Live” based on the research. I really enjoyed this—telling my story at a layman’s level. I was then able to return to Germany for two months in 2008 for invited talks and conferences. At the beginning of 2009 I travelled to Japan for another conference where I also visited some universities to give guest talks and to network.

I was also runner-up in in the Future Science and Technologies category of the MacDiarmid Young Scientist of the Year awards in 2009. That was a great pat on the back for my research—primarily for being a chance to communicate difficult ideas at a level that is easy to understand.

The University of Auckland is a world top-ranking university, which goes a long way when you go to conferences and give invited talks. There are a lot of opportunities to travel; you just need to know where to find the funds.”

