GUls, Gaze and Exergames - An Overview of my Research at the University of Auckland

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There are three areas my colleagues and me are currently doing research in, and I will try to give an overview of each of them, with the hope to rouse the interest of some of you and maybe even find some common ground for collaborations.

GUls: We are investigating tools that make it easier to specify, develop and test user interfaces. In particular, we have worked with constraint-based GUI layout, which is more powerful than most other layout models, and with tool support for testing web applications. We are currently working on extending this to mobile platforms.

Gaze: We are designing and evaluating gaze-controlled user interfaces. With eye gaze trackers becoming very cheap, using gaze to control applications opens up interesting new possibilities for natural user interfaces. In particular, we have looked at gaze click alternatives.

Exergames: We are developing exergames together with psychologists that combine traditional exercise equipment with virtual reality (VR) hardware (Oculus Rift) and body tracking. For example, we have developed a racing game and evaluated factors affecting player motivation. We also have done some work on VR rehabilitation systems.

If any of that interests you (also if you cannot attend the talk) please contact me christof@cs.auckland.ac.nz -- I will be in Clausthal the whole day on the 21 May and would be delighted to talk to you.

Bio:
Christof Lutteroth is a senior lecturer in Computer Science at the University of Auckland, where he completed his PhD in 2008. His research interests are in Human-Computer Interaction and Software Engineering.