



Smart phone skydiving

Innovative use of smart phones is one of the recent hot topics in Computer Science. Smart phones can be used for navigation, as a sports assistant or a water level and even to establish an auditory connection between two individuals. However, the full potential of smart phones is yet to be discovered and the interesting question is, how far can we take the phones.

The idea of this thesis is to think outside the box and come up with something unexpected. More precisely, we want to use the usb port of the phone to launch a parachute for a safe landing. Parachutes of small size are not a new idea themselves but this idea can be extended to a glider for example. Radio controlled small scale gliders are not a completely new idea either, but the effectiveness of using smart phones for this task is still undiscovered. For example, the phone can be used to steer the glider while providing a video stream of any obstacles.

Some useful links:

An example of how the phone could be made to steer the glider with IOIO servo control:

<http://mitchtech.net/android-ioio-servo-control/>

Small scale parachutes: <http://www.rocketchutes.com/>

Remote controlled gliders: <http://rc-paragliding.de/>

Requirements: This thesis will require creativity and knowledge of hardware design. Experience and interest in “building stuff” is required.

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