User Studies:

Proximity and Vibration

This study has proven that with only 5 to 10 minutes of practice, the users are able to understand the information from the vibration in a very successful way.

This study was set up as a redundant experience so that it would be easy for the subjects to test the experience and immediately compare their performance with the visual sense, this drastically helped them improve their performance as the exercise got more complicated.

IR at a distance and temperature

The only redundancy with this new sense is through the skin so this test will be harder to grasp for the users. A basic but somewhat boring test can be for the user to try to find which of a few identical objects is the hottest and the coldest. I would prefer a more exploratory test where users are able to walk around and understand their surroundings.

This test will answer questions related to body control and the understanding of the theoretical functioning of the sensor.

Vibration and Cellphone sensors

This test is important because it will allow me to create more than one haptic feedback at the same time. The users will have to try and discern between 2 or 3 vibrations in different parts of the body, all with a different meaning. At the same time, this will be an exploratory test so that the users can walk around and interpret their surroundings with little information to start with.

Timeline

August - September

Start user studies

September

analyze results and present to advisors

October

Write, defend and write.