MASTERS THESIS'
AT FLATFROG

CODING OF INFORMATION IN PHYSICAL PATTERNS ON A MULTI-TOUCH SCREEN

Normally a multi-touch screen cannot identify which object that touches it. In a vast number of applications that ability would be desirable if not necessary. As an example you can think of a poker table application where it would be necessary for the system to identify the cards which are put on the table, both their position as well as their value. Coding information into physical objects has already been done with camera based touch solutions (e.g. http://www.youtube.com/watch?v=giDF9lKhCLc) but these systems work poorly in practice as they are bulky and susceptible to ambient light.

In the suggested project the student will evaluate different possibilities of coding information into objects to determine their identity, position and rotation. This will be done on a PSD (Planar Scatter Detection) enabled touch table.

The project mainly focuses on programming the FlatFrog multi-touch screen to be able to identify objects, but there will also be an element of developing suitable tokens to use.

IDENTIFICATION OF MULTIPLE PASSIVE PENS ON A MULTI-TOUCH SCREEN

That fingers are not the best tool to draw with can anyone who has used finger paint agree upon. Today most people use their touch screens only with their fingers and if you want to be able to use a pen that works well, then that solution is usually very costly.

In the suggested project the student will investigate and evaluate different possibilities for implementing the use of passive pens on a PSD (Planar Scatter Detection) enabled touch screen. A further goal of the project is to be able to uniquely identify the pens without integrating an active component in the pen itself.

The project mainly focuses on programming the FlatFrog multi-touch screen to differentiate between pens and fingers but finding pens suitable for use will also be part of the project.

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FLATFROG LABORATORIES

FlatFrog bring to life the exciting new world of multi-touch computing and applications. Designed from inception for volume production, our patented technologies enable unmatched in-glass multi-touch performance for displays in a slim form factor.

FlatFrog
the future at your fingertips

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