Pravega

Infi-Zeal Technologies

Hosted at IISc BANGALORE

Touch & Augmented Reality

Content Outline:

Basic of surface computing
What is Surface Computing?
Earlier prototypes of Surface Computing
Future of Surface Computing

Techniques used in Surface Computing
Different techniques used in Surface Computing
Frustrated Total Internal Reflection (FTIR)
Diffused Illumination (DI)
Front Diffused Illumination
Rear Diffused Illumination
Laser Light Plane (LLP)
Diffused Surface Illumination (DSI)
LED Light Plane (LED-LP)

Tracking your touch
Software used for tracking your touch
How does it track your touch?

Final self made prototype
Making a small touch pad
Working of touch pad

What is Kinect?
How it works
Other Hardware Devices

Images & Pixels
What are Images?
Formations of Images and Pixels
Frame Rates

What is Open NI?
Natural User Interface Software set up

How Does Open NI works

Installation of Open NI
What is processing?
Installation of libraries

Building your first sketch (Program)

Working with Depth Images
Occlusion and depth shadows
Noise at Edges
Distortion due to Reflection

Motion Sensing Applications
Tracking nearest Object
Making a wireless measuring tape
Controlling your Digital World **Students Learn from workshop**
1. They can make their own touch pad.
2. They can convert their laptop screen into Touch screen.
3. Can play music thru paper.
4. Can control laptop/desktop thru gestures.

Instructions:

No image processing and No mat lab.

Any student any branch any year can attend the workshop.

Take Away for each participant
1. A participation certificate
2. A software cd toolkit consisting of various different software(s) for Touch & Augmented Reality
3. Lifetime email support.
4. 10% Discount on Summer & Winter Training Program by Infizeal.