



INFIZEAL

TOUCH & AUGMENTED REALITY WORKSHOP

Touch & Augmented Reality Workshop

It is one of the latest technologies on which **Microsoft, Apple** and **Intel** all are working. In it rather than interacting with computer with help of any interface like mouse or keypad we interact directly with computer which is also known as Natural User Interfacing. At the end of this WORKSHOP students will be able to make their own multi touch pad. So lets the computing begin in a completely new way and step forward into a completely new era of **Motion Sensing & Gesture Computing**.

❖ **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.

Students are required to have zeal to learn something new

- 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



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Technologies