

3D AUGMENTED REALITY WORKSHOP

We all have five senses; how sad that our connection to computers is “sensory deprived and physically limited,” as Nicholas Negroponte (a founder of MIT’s Media Lab) so aptly phrases it.



Visual displays are gradually improving, but our sense of touch is limited for most of the time to the feel of the keyboard and mouse.

What will our world be like in 2020? Digital technologies will continue to proliferate, enabling ever more ways of changing how we live. But will such developments improve the quality of life, empower us, and make us feel safer, happier and more connected? Or will living with technology make it more tiresome, frustrating, angst ridden, and security driven?

What will it mean to be human when everything we do is supported or augmented by technology? Why not break away, and wander in smart environments covered in living displays, or carry a system with you as an extension of your senses, augmenting vision?

Let us blurred the line between real and virtual world.

In this workshop we will explore the opportunities for surface and gesture computing with help of some live demonstration of surface + gesture computing where we will control our pc with waving hands only in air.

3D Augmented Reality Workshop is an interesting workshop and can be attended by any branch, any year students.

First time ever in INDIA **“3D AUGMENTED REALITY”** Workshop we are teaching students on the following aspects.

- How to convert their normal Laptop or Desktop Screen into multi-touch Screen i.e. they will be able to give input through the screen of the laptop/desktop.
- They will be able to make their own multi-touch pad.
- Students will be able to make AR objects, games and characters.
- Can make 3D AVTAR.
- Can capture 3-D Image throw Video
- Can create your own augmented world and play with it.
- Will get the 3D display on their laptop or desktop.
- Can make their own augmented reality app

MODULES DAY-WISE

DAY 1

BASICS OF SURFACE COMPUTING

- Introduction
- What is Surface computing?
- Earlier Prototypes of Surface Computing
- Future of Surface Computing
- Conclusion

TECHNIQUES USED IN SURFACE COMPUTING

- Introduction to Different techniques
- FTIR (Frustrated Total Internal Reflection)
- RDI (Rear Diffused Illumination)
- FDI (Front Diffused Illumination)
- LLP (Laser Light Plane)
- DSI (Diffused Surface Illumination)
- LED-LP (Light Emitting Diode Laser Plane)

TRACKING YOUR TOUCH

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

FINAL SELF MADE PROTOTYPE

- Making of a Touch Pad
- Working of Touch Pad

DAY 2

INTRODUCTION TO AR

- AR vs. VR
- AR application
- Uses
- Examples

INSTALLATION OF UNITY 3D SOFTWARE

- Installation instruction
- Basic of Unity

AR APPLICATION

- Introduction
- Vuforia Intro
- Getting License key
- Image Targets
- Projection of 3D model

AR VIDEOPLAY BACK APPLICATION

- Vuforia playback intro
- Vuforia core sample
- Playing video with video playback

TAKE AWAY FOR PARTICIPANTS

- Software's and E-Books to each participant.
- Certificate of participation to each participant.
- Hands on session.
- Practical Exposure.
- 6 months E-mail support to participants.
- 10-20 % discount to participants enrolling in Training program.