

Thanks for showing interest in **Vortex IIT Delhi & What After College (WAC) Augmented Reality Workshop.**

Our aim is to address the students' apprehensions and anxieties regarding their career prospects in Augmented Reality. It is a "One-Stop Workshop" for all manner of career related queries. We have lined up the country's best names in the fields of education and skill-building to help the students along in their transition from students to professionals, and answer any career-related questions or doubts they may have, to their utmost satisfaction.

Workshop Dates: 9th & 10th April 2016

Workshop Venue: Indian Institute of Technology Delhi

Top Features

- 2 days long workshop with Prize winning Competitions
- Hundred plus delegates expected from all across North India

Agenda of WAC | Augmented Reality Workshop

- Day 1
 - 1st Quarter : Basic of Touch computing
 - 1st Quarter : Techniques used in Touch Computing
 - 2nd Quarter : Tracking your touch
 - 2nd Quarter : Final self made prototype
- Day 2
 - 1st Quarter : What is Kinect?
 - 1st Quarter : What is Open NI?
 - 1st Quarter : Installation of Open NI
 - 2nd Quarter : What is processing?
 - 2nd Quarter : Building your first sketch (Program)
 - 2nd Quarter : Working with Depth Images
 - 2nd Quarter : Motion Sensing Applications

WAC | Augmented Reality Workshop – Benefits | “What do I stand to gain?”

- Hands on session
- They can make their own multi-touch pad.
- They can convert their laptop screen into Touch screen.
- Can play music thru paper.
- Can control laptop/desktop thru gestures.
- Can Play Virtual Drum
- Can make a Wireless Measuring Tape
- Can capture 3-D Image throw Video
- Certification on participation from Vortex IIT Delhi

“How much do I have to pay?”

- **Standard Pass:** Rs. 1,500/- per student (Inclusive of all applicable taxes)
- **Standard Pass with Lunch:** Rs. 2,000/- per student (Inclusive of all applicable taxes)

About the Partner Organizers | Infizeal Technologies

An IIT Delhi alumnus venture, an independent firm that provides services in IT & Embedded Systems and also conduct workshop & training for students of different streams. Infi-Zeal Technologies, an ISO 9001:2008, is a Brainchild of a team of corporate professionals from IIT Delhi. It is an IT Solution Company, offering Web Security and Network Solutions, IT consulting and embedded system Support Services to numerous clients across the Globe. We provide high quality solutions across platforms, be it Web, Desktop or Mobiles. We have a panel of experts who believes in making things happen and through which we have gained our clients credibility to have better IT Management and better IT Solutions.

Website: <http://www.infizeal.com>

“Whom should I contact for registration?”

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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 **TOUCH Computing**.

❖ **Basic of Touch computing**

(DAY 1) (1st quarter)

- What is Touch Technology?
- Earlier prototypes of touch Computing
- Future of touch Computing

❖ **Techniques used in Touch Computing**

- Different techniques used in Touch 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**

(2nd Quarter)

- 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?**

(Day 2) (1st Quarter)

- 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?

(2nd Quater)

- 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 multi-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.
5. Can Play Virtual Drum
6. Can make a Wireless Measuring Tape
8. Can capture 3-D Image throw Video

Students are required to have zeal to learn something new

- any student any branch any year can attend the workshop.

Touch & Augmented Reality

www.infizeal.com

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Course Content

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

Kinect

Introduction to Kinect

Basic Features of Kinect

How it works?

Other hardware devices

Image and Pixels

Introduction to images

Introduction to Pixels

How images are formed?

What are pixels?

Brief view of Frame rates

Open Natural Interface

What is Open NI?

Natural User Interface Software Setup

How Open NI Works?

Installation of Open NI

Processing

Introduction to Processing

• What is processing?

• What are libraries?

Installation Of Libraries

Building your first Sketch (Program)

Working with Depth Images

Occlusion and Depth Shadows

Noise at Edges

Distortion due to Edges

Motion Sensing Applications

Tracking nearest object

Controlling your digital world

Making a wireless Digital tape

After the workshop, Students learn :

How to make their own Touchpad?

How to control music with paper?

How to convert their Normal Laptop Screen to Touch Screen?

How to control laptop with gestures?

Take away for participants:

Certification:

- Each Participant will get a participation certificate.

Infizeal Toolkit:

- Each participant will get a toolkit containing various software of Touch and Augmented Reality.

Email Support:

- Lifetime Email support

Summer/Winter Training:

- 10% Discount on summer & Winter Training Program by Infizeal Technologies.

Infi-Zeal Technologies:

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