

Augmented Reality

Overview:-

Technology is now as agile as time, the discovery of Google glasses is one such live example why augmented reality is one of the present cutting edge technology. Enhancing one's current perception of reality, AR technology allows for a digitally manipulable, enhanced and interactive view of users real world. Along with acting as a tool of amplifying digital information it is a connecting link between reality and virtuality of our environment.

This workshop will enable participants to work with AR modules, build modules including overlaying text, video, 2D and 3D elements. Animation and interaction with elements by making responsive ARs will be an amazing thing to learn from this workshop.

Course Content:

Introduction to JAVA:

- Why Java?
- Variables and Constants
- Introduction to Processing:
- Why Processing?
- Programming Syntax
- Getting Started with Processing
- NyARToolkit library
- GS Video Plugin **Variables:**
- Creating Shapes
- Overview on OpenGL
- Building Sample Applications

Augmented Reality:

- Introduction
- Different AR degrees
- Augmented / Virtual Reality
- Sneak Peek on Google Glass
- Overview on Tool Kit
- Architecture
- Interfacing NyARToolkit Library
- Graphics & Rendering:
- Overlaying 2D & 3D Surfaces
- Color Space Conversions
- Recognizing Different Patterns