

INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

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ReadMore - Augmented Reality Video Playing Environment

A dissertation by

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Abstract

In the past, people wrote on sand. People started writing on paper as the invention of paper. Papers changed in to power point presentations, eBooks, PDFs as technology invaded all most all the fields. Still most of the countries use lecture notes as their primary method of education. Still printed lecture notes itself play huge role in education arena. Taking lecture notes helps you for your comprehension and retention. Researchers have found that Retention after 72 hours of the content that learnt using orally and visually is higher as 65%. A method should be implemented to combine standard teaching methods and modern methods. Researchers have suggested that the implementation of augmented reality with traditional lecture notes will make lecture notes more efficient.

Basically purpose of the system is to make a bridge between traditional and modern day teaching techniques in order to provide rich learning environment to the students using Augmented Reality.

The solution is implemented for Windows Mobile platform. For the marker detection and projection SLAR tool kit has been used. Algorithm for marker detection is threshold algorithm. YouTube integration done using YouTube API for .NET v3.

After implementation, ReadMore was tested and evaluated with the help of potential users and domain experts. When looking at the test results and the evaluation results it can be seen that the requirement analysis, design of the system and the implementation of the system has been carried out effectively.

Subject Descriptors:

- H.3.3: Information Search and Retrieval
- H.5.1 Multimedia Information Systems
- I.4.6 Segmentation
- I.4.7 Feature Measurement

Keywords:

Augmented Reality, Marker Detection, SLAR Toolkit