

INTELLIGENT AND DEEP LEARNING APPROACH TO MEASURE E-LEARNING CONTENT IN ONLINE DISTANCE EDUCATION

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ABSTRACT

The development of IT and ITeS today the world moves to access IT resource anywhere and anyplace with the power of Internet. The usage of online resource and self learning is to enable the learners' community to access intelligent based system. The support of internet and mobile learning platforms the technological teaching aids like digital learning, videos, playback lectures, animations, asynchronous discussion and social media are playing vital role in self learning. This paper provides the intelligent and deep learning processes are involved to analysis the usage of Open Source Learning, Mobile learning and Distance Learning. This research involves the use of face-to-face online lectures and online discussion boards problems. Accessing video or learning contents by using smart phones or any other agents, this analysis report provide clear idea about learning perceptive and usage perceptive. Each lecture task includes knowledge, skill, competency and expertise. This paper describes the model of intelligent and deep learns process is involved in Self learning systems.

Keywords: Self Learning, Mobile Learning, Online Resources, Deep Learning, Intelligent systems, Distance Learning

INTRODUCTION

The Open and Online Education system was introduced and developed University of Colorado in 1980. Now the involvement of technological growth and improvement of mobile computing more number of self learning and E-learning system are developed. Nowadays in India AICTE and UGC are designed new model curriculums with the importance of self learning systems. IITs are developed NPTEL, Spoken Tutorials and Online Certification courses for teachers and students. eDx and Solo learners are played important in distance based learning. The importance of online resource accessing and strength of interactive learning approaches are taking shift from formal, classroom teaching to informal and interactive distance based learning.

The growth and advancement of technology in wireless and mobile communication like 4G, Wi-Fi, ZigBee, Smart Phones and Android comes to the picture. Open cast recorded lectures are developed to the learners' community but the problem is external noise, conversion problem and platform dependent failures. Free and Open source software came to picture and we can access from any platforms, redistribution, without any restrictions access and free of cost. The Linux based OS are used in online resource access and learning systems. The intelligent systems are developed by the use of open source platforms.

The social media and web services are important for accessing database, perception, comments, attitude and expression. There is no separate platform or tool for monitoring perception and actuating systems. Because as per the survey of self learning and online learning portals most of users are ideally sitting and playing videos. So we have intelligent and deep learn mechanism to monitor the process. The open rank systems are developed for finding usages, top stories, trend analysis, etc. The main problem faced by learners they are interested to use open source software but the commercial software and UI based platforms are user friendly. So we are depending with that the basic level of understanding and usage also need to monitor. This form of interactive access is more benefits for users, learners and educators. They can easily use, access, comments and monitor the whole process. This paper describes following sections, Section-II enables various related works about distance

and e-learning systems and Section-III describes models and intelligent process, Section-IV gives analysis and conclusion results.

RELATED WORKS

Anadolu University began offers online education with distance based learning without using open source platforms and invested huge money for accessing and broadcasting. The power social media and access are important in collaborative enabling and emerged technological growth. Recording and broadcasting process are determined by each data acquiring systems and context based search involved to test positive and negative attitude.

The open source software usage can access easily and no need have specialized software for accessing or monitoring process. In International Conference on Mobile Learning at 2012, the recorded video lectures are telecasted and varieties of open access tools are delivered. The Opencast Matterhorn are developed with right learning, context aware, access from anywhere, mobile learning, universal access, interactive access and discoverable.

Distance based learning is increasingly major part in education fields with the help of computes, internet, graphics and multimedia components. E-learning is also form distance learning and it is promoted flexible deliver and support of assessment.

The development of technology and growing fast of generation's number of electronic resource accessing tools are developed and various portals are developed. In this context use of internet and online resources are increased tremendously. The reports said, the content is very important for accessing all interactive videos and each information are analyzed and recorded for further improvement.

Xjournal is the online portal combine with lesson plans, video and activities. Further development it is analyzed and developed online assessment portal and testing hypothesis also. Wang et al, the online games are designed and it is increase learners attitude and concentration power. Online games and mobile apps based interactive games designed, nowadays mobile apps developed are playing important role. Usage of mobile phones and internet is increased in day-to-day as well as the technology development we need to move onto self and distance based learning system.

LEARNING SYSTEM

The following are the lecture capturing and interactive recording procedures. It is used to integrate all the existing models and provide intelligent based monitor process.

Open access based Intelligent and Deep Learn Process

1. Distribution Process: All the information and video content to be collected. Each acquired information to be modulated or compressed as Unicode format for access specification. There is common platforms are designed and user can access any platforms like iOS, Cloud, Microsoft, etc
2. Integration and Recording systems is needed in each and every process
3. Scheduling, Editing, Uploading, Metadata, processing are to be automated and monitored
4. User Interface and Interactive access to be monitored because of screen resolution and size.
5. Content based search and slide preview also needed in each stage

The following (figure 1) shows that Intelligent based Open learning – we can access the information or content from anywhere and place with the usage of internet. Now the power cloud enables we can access sitting one place and Wi-Fi enabled service to provide resource sharing also.

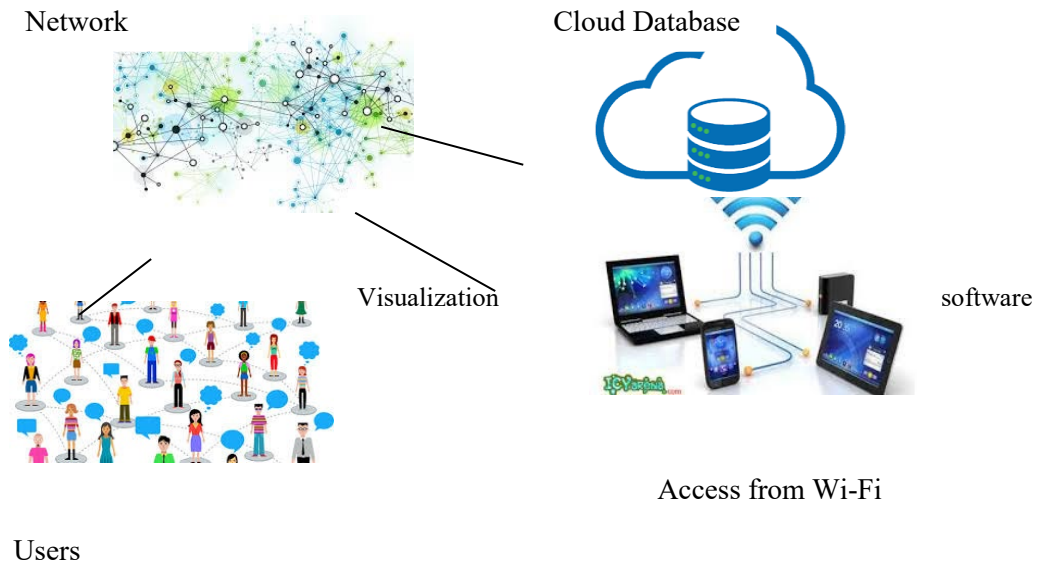


Figure 1: Overview accessing information

It helps and gives conceptual understanding of each topic. Geometrics diagrams, computer graphics layout, complex systems, logical reasoning is provided interactive and more logistics bases. Lot of open source mathematical tools are developed for learning and editing purpose like Graph, Sage, Geogebra, etc.

The learners are very much interested in face-to-face to lecture to avoid language problems, lack of communications and difficult to handle self learning assessments. The Open source learning have following points

1. Administrative or individual login access to access the site
2. Individual profile, administrators roles, data access policies are to be recorded
3. Each stage operations are clearly defined
4. Well defined schema and UI are more interactive
5. Include security precautions for avoiding confusions

The following (figure 2) describes architectural diagram for content and interactive learning process. Each stage has individual process and deep learning perceptive.

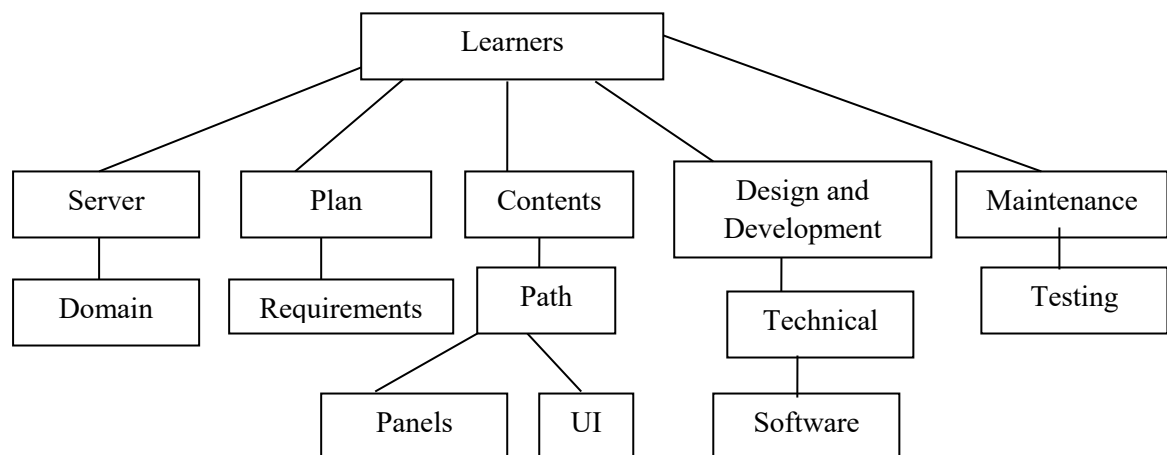


Figure 2: Architecture Model Open Access System

The following (figure 3) shows that interactive learning process, which is used to involve motion, animation, sound and multimedia operations. In this section it involves the interactive question answering system, capturing and recording.

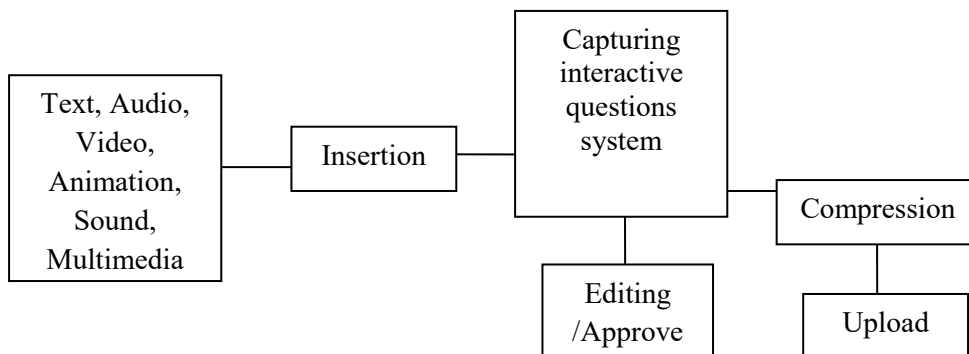
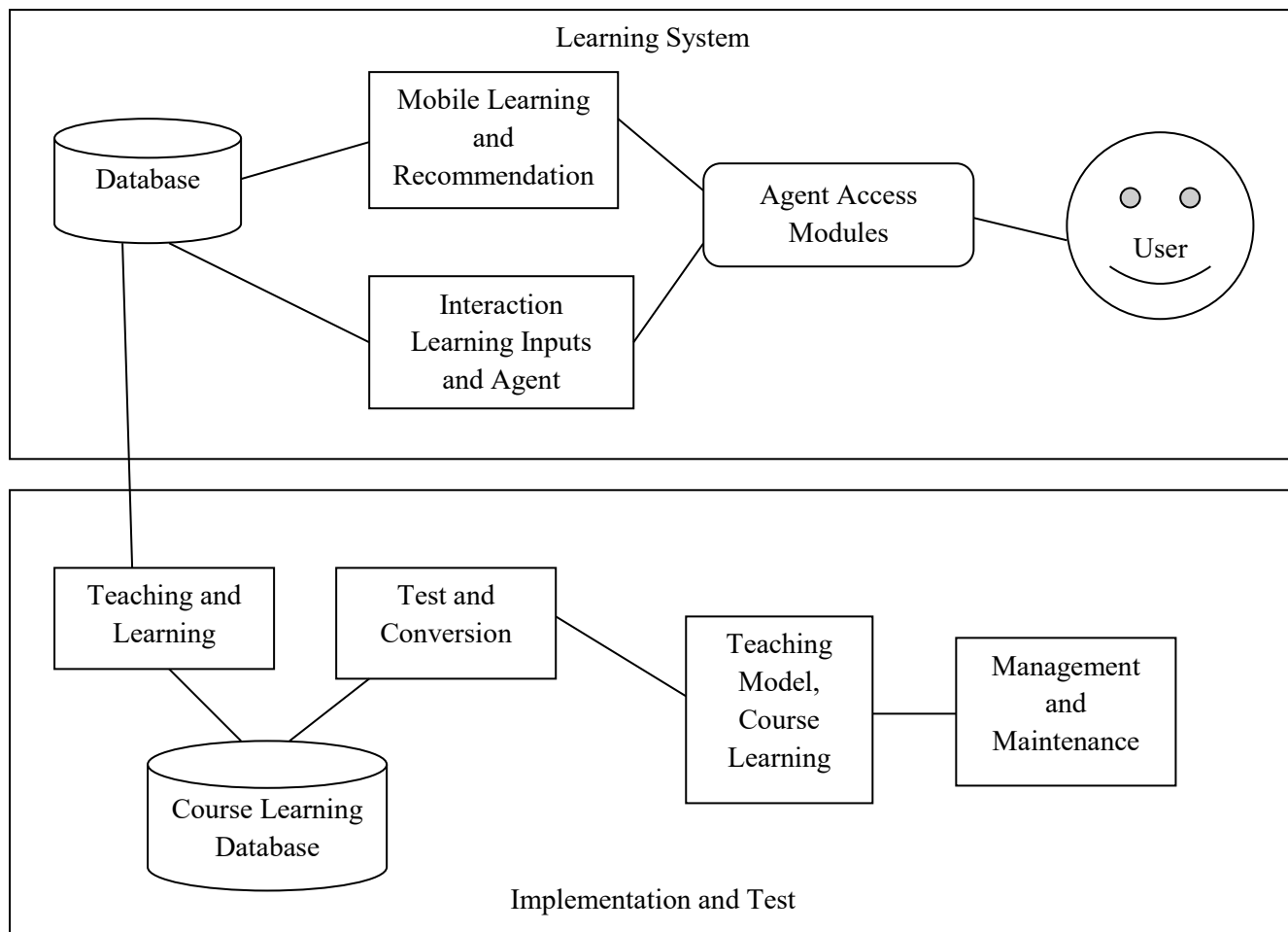


Figure 3: Block Diagram for Interactive Learning

COMPUTATIONAL INTELLIGENCE

Computation process is used to solve mathematical problem and produce analysis report. Here we describe three dimensional object models in value addition and computational capabilities. Example AICTE developed Swayam mobile app and portal for online learning process and it gives analysis report which includes all the metadata. But in this case the prediction and calculation of huge inputs tracks we couldn't record all the details. We developed following (figure 4) for learning architecture with intelligence and deep learning systems. Each stage we analysis report using deep learn process and produce multi agent model interactive learning systems. User can process the request and access the resource from any deployment stages. Database provides complete information about learning and recommendation process.



- Step 1: Analysis the use of open learning and distance based online process
- Step 2: Identifies users/learners details and perceptive
- Step 1: Collect the database and apply conversion, Unicode and access specification
- Step 2: Each components and metadata to organized and give assessment, exam organization, evaluation process
- Step 3: Includes administration capabilities, rules and regulation of learning process
- Step 4: Select the quality factors such as distance learning, prejudices, open education process
- Step 5: Apply copyrights, legal notification and ethics
- Step 6: Mention open system education, perceiving and context level processing

Figure 4: Implementation of Learning Systems

This research aims to help interactive learning using various screen and conventional/traditional tools with intelligent and deep learning behaviors. Method of learning with various agents like mobile, webapps, desktop computers, tablet, etc are supported the learning process and competent with technical skills, personal ability and expertise. The following are the interactive learning apps and assessment method sample with learners' metadata.

The screenshot shows a learning portal interface with a sidebar menu on the left containing options like 'Main's Class Room', 'InfoTech', 'E-Learning', 'Materials', 'Contact Me', 'Site owners', 'More Stuff', 'Reading List', 'User's List', 'Department', 'Publications and Achievements', and 'Current Poll'. The main content area displays a 'Reading List' with several items, including 'Working with J2EE', 'Cloud Infrastructure and Service', 'Oracle Java Fundamentals and Java Programming', and 'Mobile Application Development Lab'. Below the reading list is a table with columns 'S.No' and 'Contents' listing five tasks related to developing applications with GUI components, layout managers, event listeners, native calculator applications, graphical primitives, and database usage.

Academic Year	2015-2016	Semester	Even
Year/Semester/Class	16/15/17	Course Code	CS6619
Course Name	Artificial Intelligence	Faculty Name	S.Mankandoo,AP/IT

Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	-	-	-	-	-
CO2	2	1	-	-	-	-	-
CO3	2	1	-	-	-	-	-
CO4	3	2	1	1	-	-	-
CO5	2	1	-	-	-	-	-

Course Outcomes	PSO1	PSO2	PSO3
CO1	2	2	2
CO2	2	2	2
CO3	2	2	2
CO4	3	3	3
CO5	2	2	2

Timestamp	Name	Reg. No	Branch	Year	Contact Number	Email	
12/4/2017 10:15:34	N. AKILA	8 20814E+11 B	TECH(IT)	FINAL YEAR	7639369451	akilaaki7639@gmail.com	
12/4/2017 10:16:54	G. GOWSALYA	8 20814E+11 B	TECH-IT	FINAL YEAR	9095237809	gowsalyasanthi@gmail.com	
12/4/2017 10:19:00	S. swamalatha	8 20814E+11 B	tech(IT)	final year	9944375001	swamalathas1997@gmail.com	
12/4/2017 10:19:13	K. VUITHIRA	8 20814E+11 B	TECH(IT)	FINAL YEAR	9047964299	vijbettfinalyear@gmail.com	
12/4/2017 10:22:20	kaviyarasi v	8 20814E+11 B	Tech-IT	final year	8270981800	cleverkavi1903@gmail.com	
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12/4/2017 10:23:12	S. ELAKKIYA	8 20814E+11 B	COMPUTER SCIENCE A	FINAL YEAR	9751925796	elakkiyaindra123@gmail.com	
12/4/2017 10:23:32	gadma G	8 20814E+11 B	TECH(IT)	IV	9095921282	queenpadma0302@gmail.com	
12/4/2017 10:24:26	S. DIVYABHARATHI	8 20814E+11 B	IT	IV	8526847034	divyaseharaj65@gmail.com	
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12/4/2017 10:26:54	M. Mathivanan	8 20814E+11 B	Tech (IT)	final year	7502290690	mathinfotech10@gmail.com	
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Figure 5: Learning Portal, Assessment and Metadata Details – Interactive Session with Intelligent and Deep Learning Results

This method is very important for following reasons; we applied intelligent data analysis system for learning and perception process. Each stage agent based learning models are used to verify question answering, impact of usage, advancement and technological shifts. The real time interactive learning provides improve the effectiveness and performance.

CONCLUSION

The interactive learning systems involve enhancing learning, intelligent process, deep learning activities in agent based learning process. This application runs from anywhere and anyplace and collects learners' details. We collect collaborative results and give exact survey of good and weak probable results. According to this research we developed statistical analysis and participation of social media contents, environments and internet users. Each approaches related to content based search and study of learning based process. This paper provides complete details of working, studying and analyzing each content. The various applications such as mobile apps, web apps and learning process are designed and interactive learning videos are designed with intelligent behavior and deep learn metadata results. Learners and Administrator monitor and get analyzed report for further decision. In future decision based and natural language processor will be used for development.

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