# **NEW HORIZON**

# **COLLEGE OF ENGINEERING**



Approved by AICTE & ISO 9001:2008 certified Accredited by NAAC with 'A' Grade

The Trust is a Recipient of Prestigious Rajyotsava State Award 2012 Conferred by the Govt. of Karnataka

Awarded Outstanding Technical Education Institute in Karnataka- 2014 Ring Road, Bellandur Post, Near Marathalli, Bangalore-560103, India

(An Autonomous Institution Affiliated to VTU)



"A Knowledge Granary"

A Monthly Newsletter from Department of Master of Computer Applications

Volume No.: 3, Issue No.: 1

January 2017

# Message from Head,

Welcome to the August 2016 edition of RAPID-SHARE!. This exciting edition of August month showcases the TechKnow , AAD, FOSS and E-DAP Club Reports , MIS Reports for the Month of December 2016 and January 2017 , R&D Publications of our Faculty Members, Synonyms and Antonyms.

Dr.V.Ilango

Head, Professor- MCA, NHCE

# Stay Connected with

RAPID-SHARE

# Prof. S.P.Sreeja

Editor in Chief, Sr. Asst.Professor, MCA

#### Dr.R.Chinnaiyan

Co-Editor, Professor, MCA

#### **Student Co-Ordinators**

- 1) Abdul Afsar Baig W, II Year MCA
- 2) Sushmita Nath, II Year MCA

### **Graphics Designer**

1) Md. Yasin Harun , I MCA
Department of Master of Computer Applications,
New Horizon College of Engineering.
E-Mail: editormcainfoletter@gmail.com

## Message from Editor

The RAPID-SHARE newsletter is just one of the tools of this MCA Course o connect to our students. It is aimed at all students with an interest in maintaining unity & integrity and hopefully will be able to learn something new and share their experiences and expertise. Each issue will have a focus, and this issue focuses on the TechKnow , AAD, FOSS and E-DAP Club Reports , MIS Reports for the Month of December 2016 and January 2017 , R&D Publications of our Faculty Members, Synonyms and Antonyms.

Prof.S.P. Sreeja

Sr. Asst. Professor-MCA, NHCE

#### Why Rapid - Share?

The **Rapid-Share** Newsletter is published every month for exhibiting the current trends in ICT via staff, students and aluminates' and various activities of our MCA Department. Igniting the younger minds with Knowledge

#### In this Issue....

College Vision and Mission	2
MIS Report	2
TechKnow Club Report	3
Galaxy AAD Club Report	4
FOSS Club Report	4
VM Ware FDP	5
Talent Search Program by Wipro	6
Faculty R&D Publications	7
E-DAP Club Report	8
Synonyms and Antonyms	8

# Latest Updates...

2<sup>nd</sup> Sem MCA Classes are scheduled from 1<sup>st</sup> February 2017.

### A Knowledge Granary

# **VISION OF NHCE**

To achieve total quality in education and excellent knowledge management through specific, measurable, attainable, relevant, time – bound goals and continuous improvement methods.

# MISSION OF NHCE

To mould our students into a holistic personality accomplished in emotional, moral, intellectual, social and mental capabilities besides inculcating a capacity for critical and lateral thinking.

### **GOAL OF NHCE**

To adhere to the reputation of being able to channel our human resources and guide the transformation process of every individual's dream into a reality.

# **QUALITY POLICY OF NHCE**

To provide education services of the highest quality both curricular and co-curricular so that our students can integrate skills and serve industry and society equally well at the Global level.

# **VISION OF MCA DEPARTMENT**

To impart quality education and knowledge, necessary to transform students from novice to professional in the field of IT and ITES with a research-oriented approach

#### MISSION OF MCA DEPARTMENT

To nurture students with a holistic approach, to inculcate knowledge, expertise and attitude with the ability to think critically, rationally and innovatively

# QUALITY POLICY OF MCA

#### **DEPARTMENT**

To impart excellence in the art of education both curricular and co-curricular, as a result of which our students learn to blend technical proficiency and humanity in serving the industry and society equally well at the global level

# MIS – Report for the Months of December and January 2017

		140	ksnop anended	by racuities and	Awards Received	
S.No	Date	Dept	Name	University	Topic	Remarks
1	11.1.2017	MCA	Dr.R.Chinnaiyan	Presidency College	Theory of Computation and Cryptography	NIL
2	3-5.1.2017	MCA	Mrs.A.P.Nirmala, Mr.Thrimoorthy	VM ware	Virtualization Essentials	Mr.Murali, VM Ware
3	9-21.1.2017	MCA	Mrs.S.N.Kavitha, Mr.Viswanatha C.R., Mr.M.Govindaraj	Wipro	Digital Skill Readyness Program	Mr.Manoj, Senio Manager T&D
4	30- 31.1.2017	MCA	Mr.M.Govindaraj Mr.Binoj.M, Mrs.Jiney C Mathew	ISE Dept. NHCE	Mobile Application Development Workshop	Nil
5	26- 30.1.2017	MCA	Mr.Siddegowda C.J.	SIT , Tumkur & Infosys	Infosys Campus Connect Program , FPSD Python	Prof.Anup Kumar and Mrs.Sahana

# Guest Lecture, Conferences, Workshops, Symposiums, Fest, Industrial Visits etc

Date	Dept	Program	Topic	Conducted by	Designation
9 & <mark>10th</mark> Jan 2017	MCA	TechKnow Club	Internat Awareness Programme	TechKnow Club Members & Dr.V.Asha	TechKnow Club President and Members
20,1.2017	MCA	FOSS Club	INEFFABLE	FOSS Club Members & Mr.Siddegowda	FOSS President and Members
27.1.2017	MCA	AAD Club	Galaxy	AAD Club Members & Mrs.Jincy C Mathew	AAD Club President and Members
31.1.2017	MCA	E-DAP Club	Creatrix	E-DAP Club Members & Dr.R.Chinnaiyan	EDAP Club President and Members

**Dr.V.Ilango**Professor & Head - MCA

# Internet Awareness Program To Government High School Students-EduMission - Dawn of Knowledge

Knowledge Awareness Campaign: Ever since Mr Nelson Mandela said "Education is the powertool that we can use to change the world", there was something magical in his words which swayed across every soul on this human earth. Here we attempt to connect a few students of Government School to get the essence over education in technology. The proposed event is a step attempt to allow students of Government School to get the exposure of Information Technological elements, to understand their importance and also to get equipped with these resources to enhance the essentials of the present day crises and act accordingly. The event was hosted by Government of Karnataka in association with New Horizon of Engineering, organised by Department of MCA under the guidance of HOD-MCA Dr V.Ilango and under the surveillance of Dr AshaV, who was facultyin-Chief for the proposed event who was assisted by an elite panel of 20 students from the 4th semester MCA. The event was scheduled for a 2 day visit hosted on 9th and 10th of Jan 2017. The Event comprised of various recent day concepts to invoke the presence of internet technology in to the minds of young but ignorant souls. A flurry of Schools reported to be the part of the event which was about 5 from various parts of Bengaluru. There were 5 participant High schools namely GHS Kannamangala, GHS Jyothipura, GHS Doddabanahalli, GHS Bidarahalli and GHS Kadsonahalli, which comprised 266 Students on day01 and 272 Students on day02. Three Labs were allocated by the active Co-ordinance of the Lab Admin's who made it possible to run the session simultaneously. Each school were allotted a duration of 120 Minutes with a set of prerequisites essentials to be covered which included Basics of Internet, Basics of MS Office and Fundamentals of Computers. The young budding students were excited in learning the essentials of technology and there were good rapport among students and co-ordinators. was made Possible by the Deep Vision Of our Revolutionary HOD Dr V Ilango and the faculty-in-Chief Dr V Asha under the Banner of the Club TECH-KNOW **CLUB** in association with the 4th Semester Students of MCA headed by Abdul Afsar Baig.



Mr. Nadeem Akram N teaching the Govt School Students



Mr. Nischal S teaching the Government School Students



Ms. Prathibha teaching the Government School Students

**Dr.V.Asha** Professor, MCA - NHCE

# Android Application Development Club (AAD), GALAXY - Report

The event was organized by Android Application Development club of MCA department under the guidance of HOD -Dr. V Ilango and the faculty-Coordinator Prof. Jincy C Mathew in association with the 4th Semester Students of MCA headed by Praveen Kumar and team. The intent of the proposed event is to allow students to get equipped with the latest applications and its importance in the world of Android Application Development. The event began at 2:00 pm at falconry seminar hall dated 27th Jan 2017 with Vande mataram and saluted the republic of India and unveiling of the club logo by HOD-Dr. V Ilango. Praveen Kumar and Kusuma of IV-sem, were the hosts for the day, constantly interacting with the students. Welcome speech was given by Puspalatha of IV-sem, and our beloved HOD addressed the gathering by giving insight about "Social entrepreneur" to use Android app to solve problem and further discussed about App Monetization, Boot Camp and App Store Optimization.



The club members arranged activities based on finding the various applications by of pictorial representation Android applications and testing the skills of participants in selling the app by telling its features. All students actively participated in the activities and were excited to know the importance of various apps on Android which they use on day to day basis. At the end, prizes were distributed to encourage the winners and all other participants by Prof. Jincy and she gave vote of thanks to all. The memberships were registered by the

club members and the event was ended at 4.00 pm.

#### **ANDROID Workshop**

Two day workshop on "Android" was conducted on 30th & 31st of January 2017 by IS department. Three faculties, Prof. Govindaraj, Prof. Binoj and Prof. Jincy from MCA department attended the workshop .The Trainer was Mr. Ramkumar Arumugam an android developer & Trainer at MODELEXAM. Firm 'MODELEXAM' - is a based E-Learning Solutions provider. The training was about hybrid app development with appery.io. In the morning session, he gave an introduction about various Android Screen components and its usage and simple CRUD operations. And as well as explained about using Google map, YouTube, audio and image components in Apps. Then all the faculties started coding a test android app using these components which was a great learning experience. In the afternoon session we had a discussion on UI & UX for new App ideas for college or department and its coding. The session ended with the excitement of testing the App in their respective mobile devices, and certificates were distributed.

#### **INFFALE Beyond Unexplored!**

**Purpose:** To set up an environment providing a forum where the young and budding new horizonities can groom themselves with the latest developments in Open source Software and their Applications. As being part of a Technical ground which is rich in software, it becomes essential to get updated with the latest software stuff in open source community.

**Vision:** We as a part of human community believe that right to knowledge is applicable for every soul over this planet earth, more over it becomes the duty of us being part of the community to aware the fellow people on all the happening over software domain especially, Open source software.

**Event Scenario**: The Event was the first Club event of the MCA department which falls under the banner of FREE OPEN SOURCE SOFTWARE(FOSS), with the intent of establishing awareness and

knowledge campaign within the department level premises to enhance the department Professionals.

**Insight:** On 20<sup>th</sup> Jan 2017, the forum was set in the venue falconry hall and the students were informed about the same earlier, as everything went smooth as planned. The event was scheduled at 1:45PM IST.

#### Glimpse of the event:

event Entitled "INFFALE-Beyond Unexplored!" was hosted by FOSS club under the MCA department, which was scheduled at 1:45PM on 20th Jan at the falconry seminar hall. There were about 120 students from both 4th and 2nd Semester of MCA department. The Event was kicked off by the Dynamic HOD of MCA Dr V.Ilango with his keynote on opensource software and case study on Airtel Inc. and its products. The event was also chaired by 6 faculty members of MCA department under the leadership of Prof Siddegowda C.J who is a faculty coordinator for the club. Two events were conducted for a duration of 50 minute each, with title being SOFT-CORNER and SOFTWAAR. Three winners were selected for each event by the panel of judges who were the faculties. The response was great as good amount of competition were to be witnessed, the enthusiasm was amazing with good encouragement from the faculties.

**Conclusion:** The department level event had a profound impact among the students who grasped good amount of content about the open source from the event. This is just an initial step as we Aim bigger and better in the coming days.



#### **VM Ware FDP**

Topic: Virtualization Essentials
Date: 3<sup>rd</sup> to 5<sup>th</sup> January 2017
Time: 9:00 am to 5:00 pm
Venue: VM Ware CoE - ISE Department

**Resource Person:** 

Mr. Kumara Murali (Technical Training Specialist, VM Ware) Faculty members attended:

Mrs.A.P.Nirmala, Sr.Asst. Prof, Dept.of MCA Mr.N.Trimoorthy, Asst.Prof., Dept. of MCA

New and aspiring academic and IT professionals will have an immersive training in working with virtualization environments. As more and more companies are leveraging virtualization, it's imperative that IT professionals have the skills and knowledge to interface with virtualizationcentric infrastructures. This Course has planned with learning-by-doing approach to give us hands-on training and a core understanding of virtualization. Hands-on tutorial approach helps them quickly get up to speed on the fundamentals. It helps to understand what virtualization is and how it works within the computing environment before building our own virtual machine. It facilitates us to understand how to set up the CPU, memory, storage, networking with VMware vSphere. Ultimately computing virtualization rely on technologies and the exponential spread of these and similar applications make virtualization proficiency a major value-add for any IT professional



# REPORT ON TALENTNEXT TRAINING PROGRAM CONDUCTED AT WIPRO, ELECTRONIC CITY

The program began on 9th of Jan 2017, attended by Prof. Govindaraj M, Prof. Vishwanatha C R, Prof. S. N. Kavitha. On day 1, Engineering Attributes was the topic for discussion handled by Dr. Satish kumar. In the session, we understood towards bringing innovation into the classrooms by using alternate teaching-learning methodologies and implementing active learning. They emphasized on having storytelling, brainstorming, demonstration, experimentation, analogy, problem-solving, group activity and case study in the classes. The day 2 was the start of the MILE-1 program. We had two mentors Mr. Avinash Patel and Mrs. Anitha who continued till the completion of the program. The session had hands on expertise on various OOPS concepts, Exception handling and introduction to collections. As all participants could not coup up with the concepts, the topics continued for the next day also. After that there was a hands-on experiments on the concepts learnt in the form of mini projects. The day 3 continued later by introducing us to MILE-3 which had Junit, IO, JDBC followed by an assessment project and MCQs on the 4th day. The day 5 was the start of MILE-3 which focused on concepts like HTML, CSS, JAVASCRIPT, BootStrap and Servlets followed by handson mini project. On day 6, the topics covered were JSP, AJAX and various concepts on web programming followed by a project assessment and MCQs. That was the end of our 1st week of training. In the second week, the focus was on getting us some sort of training in the form mini projects. We were given hands-on experience on solving a problem statement. The day 7 and 8 went with that only. On day 9, we learnt how to carry out unit testing on our projects. Then day 10, 11 and 12 we had hands-on training on Hibernate and Springs. The training on Hibernate and Springs was totally new to us. We learnt many concepts on these two topics. Today the two biggest challenges for Enterprise

Web Development are to manage multiple Http requests and managing data with databases. One of the most successful solution for solving the above said problem is Model-View-Controller (MVC Model). So there was lot of emphasize on making us understand what is MVC model is all about and how to do it practically. In JDBC, creating beans and managing the JDBC connection process is complicated and became mechanical work. In order to address this issue, automation of the data handling is most essential thing for real time applications. The Technology Framework evolved to address this is Hibernate. Hibernate Framework can be used to automate the Bean-JDBC process using 2 approaches, one using Xml file for mapping bean to database and another one using annotation. Basics of Hibernate framework covered and able to solve simple programs for One to One Relationship, One to Many Relation, Many to One and Many to Many Relationship.



The last topic of discussion on 21st Jan was Spring Framework. Framework simplifies the handling Multiple Http requests. Each spring framework internally converted into servlet. It helps for faster web development. We are able to understand the need of Spring and able to execute simple programs using Spring framework. After learning all these concepts, the training ended with a valedictory event on 21st Jan 2016 and all participants were given certificates.

A Knowledge Granary

# Detection and Extraction of Camouflaged Segments using Distance Matching Function

V. Asha¹, P. Nagabhushan²
¹Department of MCA, New Horizon College
of Engineering, Bangalore, India
²Department of Studies in Computer

<sup>2</sup>Department of Studies in Computer Science, University of Mysore, Mysore, India

#### **Abstract**

Camouflage is an art of hiding an object by making it appear similar to the background in such a way that human vision system fails to detect or locate the hidden object. When the size of camouflaged segments present in a texture becomes smaller and smaller and when the texture of the camouflaged segments is similar to that of the background, it becomes difficult for the human vision system to discriminate between the original background and the camouflaged segments. In the present paper, we have designed and proposed a new algorithm for the detection and extraction of such camouflaged segments in synthetic textures using one dimensional distance matching function, which is considered to be one of the derivatives of cooccurrence matrix. The proposed algorithm doesn't need the knowledge about the background and it can extract the camouflaged segments and highlight even pixel-wise change in gray level intensity within the camouflaged segments with reference to the background texture.

Published in International Journal of Combined Research & Development (IJCRD) eISSN:2321-225X;pISSN:2321-2241 Volume: 6; Issue: 1; January -2017

#### An Enhanced Approach for Performance Improvement using Hybrid Optimization Algorithm with K-means++ in a Virtualized Environment

A. P. Nirmala 1\*, S. Veni 2

#### Abstract

Virtualization plays a vital role in cloud computing. It provides better manageability, availability, optimistic provisioning, scalability and resource utilization in current cloud computing environments. However the performance issue is a major concern in virtualization. The performance of the application running inside the virtual machine gets affected by the interference of the co-virtual machines. This approach

provides novel task scheduling mechanism that allocates the suitable resources to virtual machines which are running in parallel. An interference prediction scheme is proposed to utilize characteristics that are collected when an application running on virtual machines to maintain less system overhead. Neldermead method is employed in prediction to create relationship model from the observed response and control variables. A hybrid algorithm: Ant Colony Optimization and Cuckoo search algorithm with K-means++ is adopted for task scheduling process. This approach shows effective improvements in terms of throughput and execution time.

Indian Journal of Science and Technology (Scopus Indexed), Volume 9, Issue 48, December 2016

**DOI**: 10.17485/ijst/2016/v9i48/106514

### Reliability Evaluation of Wireless Sensor Networks – A Review

#### R.Divya<sup>1</sup>, Dr.R.Chinnaiyan<sup>2</sup>, Dr.V.Ilango<sup>3</sup>

- 1.Research Scholar, Department of MCA, 2. Professor, Department of MCA,
- 3. Professor & Head, Department of MCA,

#### Abstract

WSN is an Reliability Evaluation of currently the booming topic in the communication networking environment which has a drastic advantage over the traditional method and has to be adopted in the industrial environment for the mile connections in networking . The WSN has thousands of sensor points which enable the evaluation of permanent faults, optimize the fault occurrences (by improving the WSN QoS), sensor fusion, collaborative target tracking, along with this the Zigbee based networking solution is rapidly rising as one of the best choices in order to provide the reliable WSN environment among the variety of sensor network applications. . On this aspect, this paper aims to discuss the technology to evaluate the reliability of sensor network

INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY, Vol.5 Issue(12): December 2016, ISSN: 2277- 9655

# **CREATRIX** – A Report (A Departmental Level e-DAP Club Event)

The MCA Department of New Horizon College of Engineering hosted the first departmental level E-DAP **club** event "CREATRIX" on **31.1.2017**, entitled Tuesday in Falconry Hall by 2.00 P.M. Dr.V.Ilango, Professor & Head released the E-DAP Club and Addressed the Gathering. He also introduced the Office bearers e-DAP Club Members and they had taken the oath. Mr.Channa **Keshava** , President proposed the action plan of the e-DAP Club. E-DAP Office bearers conducted the events titled "Quiz, Poster & Web Designing".



Prof.S.P.Sreeja , Prof.B.Nithya and Prof.Kavitha S.N judged and finalized the winners of the events. Dr.R.Chinnaiyan , Professor, Faculty Coordinator of E-DAP Club , Mr.Channa Keshava , President, Mrs.Sruthi ,Treasurer , Mr.Naveen Kumar S, Vice-President and the Members of E-DAP Club made the arrangements. Winners of the E-DAP Club were honored with medals.

#### **SYNONYMS**

to collapse	to break down
to collect	to gather
Comfort	consolation
Comic	comedian
commencement	graduation
Complete	Total
Completely	Totally
Concord	harmony
to condemn	to sentence

#### **ANTONYMS**

accomplice

Confederate

best	Worst
blame	Praise
bless	Curse
bitter	Sweet
borrow	Lend
bravery	Cowardice
bravery build	Cowardice Destroy
•	_
build	Destroy

#### Contribute to Rapid-Share

We invite all MCA students and faculty members to contribute articles to the subsequent issues of Rapid-Share. The articles can be either technical or general depending upon your field of interest. All submissions have to be under 500 words. Please send your articles to e-mail address (see front page) with your name, department, year of study (designation in case of faculty members). If you want your achievements and activities to be highlighted in this newsletter, please get in touch with your respective faculty and student coordinators (see front page).

#### **Feedback**

The Editorial Board requests all readers to provide their valuable feedback regarding the content and design of the newsletter. New ideas regarding columns and content will be appreciated.

#### Disclaimer

Utmost care has been taken while developing content for the newsletter. Any incorrectness of data or information is purely in advertent and incidental. All contributions could not be accommodated due to space constraints and other factors. All contributions are in our database and we will try to incorporate them in future issues. The Editors also wish to inform the readers that this newsletter for internal circulation only.