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# "A Knowledge Granary"

# A Monthly Newsletter from Department of Master of Computer Applications

# Volume No.:7, Issue No.: 2

# January 2023

### Message from Head,

Welcome to the January 2023 edition of **RAPID-SHARE**. This exciting edition showcases on various events organized in the Department of MCA. Few glimpses are highlighted here on our student's participation at department level activities and Co-curricular activities.

> Dr. Asha V Professor & Head - MCA, NHCE

### Stay Connected with

RAPID-SHARE

### **Dr. K. G. Madhwaraj** Editor in Chief, Professor, MCA

**Prof. Vishwanatha C R** Co-Editor, Sr. Asst. Professor, MCA

### **Student Co-Editor**

1) P Manasa, II Year 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 to connect to our students. It is intended at all students with significance in maintaining unity & integrity and hopefully will be able to learn something new and share their experiences and expertise.

Dr. K. G. Madhwaraj

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 Granary.

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# VISION OF NHCE

To emerge as an institute of eminence in the fields of engineering, technology and management in serving the industry and the nation by empowering students with a high degree of technical, managerial and practical competence.

# **MISSION OF NHCE**

To strengthen the theoretical, practical and ethical dimensions of the learning process by fostering a culture of research and innovation among faculty members and students.

## **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 educational services of the highest quality both curricular and co-curricular to enable students integrate skills and serve the industry and society equally well at global level.

# **VISION OF MCA DEPARTMENT**

To emerge as a department of eminence in the field of Computer Applications in serving the Information Technology Industry and the nation by empowering students with a high degree of technical, managerial and practical competence.

# **MISSION OF MCA DEPARTMENT**

To encourage long-term interactions between the department and the IT Industry through rich involvement of the Industry in the design of the curriculum and its hands-on implementation.

# QUALITY POLICY OF MCA DEPARTMENT

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

### FDP: Data Science and Machine Learning - Academic and Research Opportunities

The FDP was inaugurated on 17-11-2022 at 10.30 am. The inaugural address was given by Dr. V. Asha, HOD, MCA Dept. Later, thoughts on this FDP was delivered by Dr. K.G. Madhwaraj, Professor, MCA Dept. The resource person on 17-11-2022 was Dr. Sreekanth R, Fellow, Botho University, Africa who spoke on Kaggle and other repositories. It was a very interesting session. He also delivered hands-on exercises on machine learning and data science.

The resource person on 18-11-2022 was Mr. Koustub Prem, Software Engineer from Skyfi Labs. He discussed on the different statistical measures used for data science and machine learning. Further, he showed practical examples of how these measures can be used for academia and research.

The resource person on 21-11-2022 was Mr. Geluvaraj, Assistant Professor, Department of Computer Science and Engineering, NHCE. He spoke on the title "Machine Learning Algorithms - Supervised and Unsupervised" followed by a hands-on in the afternoon session. He gave practical real-time examples which was very accepted by the faculty participants.

Mr. GuneshShanbag, Software Engineer, SJ Innovation Pvt Ltd was the resource person for the FDP on 22-11-2022. He spoke on the title "GitHub". Further, he also stressed the differences between Github and Git and why these are important concepts in the software industry today. Some examples of using Github was also showed to the faculty.



### SECURE ACCESS SERVICE EDGE

Computer vision plays a significant role in a wide range of homeland security The applications. homeland security applications include: port security (cargo inspection), facility security (embassy, power plant, bank), and surveillance (military or civilian), et cetera. Video surveillance cameras are placed in offices, hospitals, banks, ports, parking lots, parks, stadiums, malls, train stations, airports, et cetera.

challenge The is not for acquiring surveillance data from these video cameras, but for identifying what is valuable, what can be ignored, and what demands attention. Computer immediate vision systems attempt to construct meaningful and explicit descriptions of the environment or scene captured in an image. A few Vision Computer based security applications are presented here for securing building facility, railroad (Objects on railroad, and red signal detection), and roads

In the second half, various job opportunities related to security in the real world as well as recent trends in the industry. By the end of the talk, the participants learnt the details of security based applications of computer vision algorithm.





# Financial Basics for would be entrepreneurs and Financial Planning as you step into your career

On December 15, 2022, the Dept of MCA in association with Dept of MBA, ED Cell conducted an entrepreneurship awareness session related to the financial aspects involved in entrepreneurship for the students of MCA III Semester. This was an offline event conducted in the MBA seminar hall of NHCE.

The talks gave a very clear explanation of Funding, how to get seed money to start a new venture, how should one balance the funds while taking the journey to become an entrepreneur. Since the world cup football was going on, the resource person took the example of the football game and related the game to entrepreneurship and the very essence of this art. The resource persons mainly concentrated on the financial aspects, and how one should really take care of the revenue aspects because sustenance is very important while starting a new venture. These talks gave a very good opportunity for the MCA students to learn about the financial aspects while starting a new venture.

The session was very effective and helped students to grab more knowledge in Entrepreneurship and the financial aspects attached to it. It will be definitely help students who will be having an idea of starting new ventures or setting up centres of innovation.



### **Python Programming Workshop**



On 24<sup>th</sup> December 2022, Mr. Mohammed Yasin Harun , working as Associate Senior Software Engineer in Cerner Corporation, Bangalore. He has 3+ years of experience in Industry. He is an Alumni of MCA Department, conducted a workshop on Python Programming.

Python is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation. Python is dynamically- typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly procedural), object-oriented and functional programming.

The workshop started with a brief introduction about general syntax and structure of python. Concepts of OOPs were also brushed along the way. It was an interactive session and students came up with various solutions to solve a problem. Workshop further had an intermediate level which included topics like zip - unzip, map function, generators, lambda function, and filters.

The session ended with a few discussions about use of python at industry level, how to improve coding and how to prepare oneself to face technical interviews. Students were benefited by this session and had a great learning experience.

By the end of the workshop, the participants learnt the details about various python functions and libraries and how to implement it in real time scenarios. The workshop provided a good insight on various python methods used. It helped students to understand coding practices in industry for efficient handling of projects.

Social interaction helps ward off depression and stress, both of which can contribute to memory loss. Look for opportunities to get together with loved ones, friends and others — especially if you live alone.



### **Achievements of Students**

Adarsh Ishwar Hegde and Manoj Kumar A. R. from Semester III, SY 2022-23, Department OF MCA, New Horizon College Of Engineering, secured FIRST place in the event CODE- 0-FIESTA at E[X]PECTATIONS 2023, organized by the Department of Statistics and Data Seience, CHRIST (Deemed to be University), Bangalore on 20<sup>th</sup> and 21st January, 2023. They received a cash prize of Rs 8000/-.

Kundan Kumar and Jitendra Giri received best paper award for their research paper presentation at the conference CCIP 2022.

Aravind M and Dinesh Babu's research paper has been selected as one of the best paper in the ICICACS-2023 conference.

### **Exploring Kanji**

Kanji are the logographic Chinese characters taken from the Chinese script, and used in the writing of Japanese. They were made a major part of the Japanese writing system during the time of Old Japanese and are still used.

Kanji is really essential as it's strongly integrated within Japanese writing system. It may look intimidating with the number of strokes but they're just rough sketches of a picture!

# **Augmented Reality**

When someone talks about AR, they are referring to technology that overlays information and virtual objects on realworld scenes in real-time. It uses the existing environment and adds information to it to make a new artificial environment. Many developers are creating augmented reality apps, and this has opened up the technology to many applications and a broader audience. Think about all that purchase power by enabling another medium — especially when the technology make its way into our everyday life.

Let's explore some real-life applications of this technology.

- 4 Manufacturing
- ↓ In Store Shopping Experience
- **4** Logistics
- \rm Advertising
- \rm Healthcare
- Remote Collaboration
- \rm Gaming
- 4 Education

Augmented reality lets users communicate seamlessly regardless of their locations, enables paperless enterprise journeys, accelerates learning through interactive 3D content, plus other potent promises and applications.

The popularity of XR is on the rise and this time it's emerging globally not just in United States. In fact, Singapore has seen the most growth in the recent years. It's surpassing the pure entertainment use in social media the enterprise solutions are saving millions of dollars by cutting down production or maintenance time while e-commerce retailers are selling more products by incorporating the new technology and increasing shopper experience.

> Ms. P Manasa 3<sup>rd</sup> Semester MCA



A *kanji* can have more than ten possible readings! A *kanji* traditionally has two readings, the *on-yomi* meanings known as "Chinese reading", and the *kun-yomi* reading known as "Japanese reading". If one usually only has two or even three *on-yomi* readings, the number of *kun-yomi* readings can quickly increase. The kanji  $\pm$  (which means "life, birth, authentic, raw") has, in addition to its two *on-yomi* readings, about ten *kunyomi* readings!

> Mr. Aditya Venkat Ganesh P, 3<sup>rd</sup> Semester MCA

### **Inner Thoughts**

### **Treat Equally**

Don't look down on others just because they have something lacking, Learn from the stars, how big of a creatures they are, still they appear small.

#### Path of Life

When we choose our own paths, let us walk alone on those paths, because if someone comes along, the paths will go astray.

### **Being Grateful**

Things we see all through the day are all beautiful, it's just that we are in dark about the art of appreciating!

#### Mr. Arshe Alam

**3rd Semester MCA** 

### Sabr - e – Zindagi

Sabr kar aye zindagi, teri raah me kayi mushkilen aayengi, Tu bhagega wo takrayegi , tu jitega wo harayegi, Tu sambhlega wo teri raah me thokar ban kar aayegi, Tu gir kar uthega to wo tere hosle ko dekh tut jayegi, Tu himmat kar, raah ke har mod pe teri emtehan li jayegi, Tu jeetega lakho nakaam koshishon ke bad bhi, sabar kar aye zindagi, har mushkil tujhe chalna

sikhayegi !!!

Mr. Arshe Alam 3<sup>rd</sup> Semester MCA

### A Walk from Campus to Corporate

**Motivation:** The present instance is an attempt to sum up the activity being hosted in New Horizon College of Engineering under the department of Computer Applications titled **"Campus to corporate**", where in all the essentials required for a new horizonite to enter into the corporate atmosphere is being packaged under a single activity.

#### WorkFlow:

1. The event titled **"Campus to corporate"** is being hosted in new horizon college of engineering under the department of MCA for MCA and M tech students.

2. This is a weekly event comprising of 2 sessions of 2 hour on 2 days of every week .

3. Each session has a well-defined concept such as problem solving, decision making etc.

4. The major concepts evolve aptitude, reasoning, verbal communication, soft skills, presentation tactics.

5. Every comprises a well experienced corporate trainer from the consultancy termed "ethnus"

6. Every session houses nearly 70 students comprising of both MCA and M.tech Students per section a total of which forms nearly 210 students.

7. The jovial nature of the trainer enables each and every individual to interact with the trainer and understand the concepts in a much simpler and productive manner.

6. During the month of February 2017 a total 8 sessional of 2 hours each was hosted.

7. Concepts such as :Time speed and distance, average mixtures Allegations, blood relations and directions etc were covered.

A Knowledge Granary

8. Career building skills are being put forth to raise the relevance of knowledge to survive over the IT atmosphere..

**Culmination:** The management at New Horizon College of Engineering is very particular about connecting the students to the high end platform of corporate world, also the dedicated team of training and placement department are leaving no stone unturned to bridge the loop hole between the industry and institution.

Mr. Sarath C Murali, 3<sup>rd</sup> Semester MCA

### Internet of Things Devices & Examples

- 1. **Amazon Echo Smart Home:** The Amazon Echo works through its voice assistant, Alexa, which users can talk to in order to perform a variety of functions. Users can tell Alexa to play music, provide a weather report, get sports scores, order an Uber, and more.
- 2. **Fitbit One Wearables:** The Fitbit One tracks your steps, floors climbed, calories burned, and sleep quality. The device also wirelessly syncs with computers and smartphones in order to transmit your fitness data in understandable charts to monitor your progress.
- 3. **Barcelona Smart Cities:** The Spanish city is one of the foremost smart cities in the world after it implemented several IoT initiatives that have helped enhance smart parking and the environment.
- 4. **AT&T Connected Car:** AT&T added 1.3 million cars to its network in the second quarter of 2016, bringing the total number of cars it connects to 9.5 million. Drivers don't have to subscribe or pay a monthly fee for data in order for AT&T to count them as subscribers.

#### **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.