

## **VIBRANCE** January-March 2018, Vol. 11, Issue 1



Quarterly E-Newsletter of Dept. of I.T, I.T.S, Mohan Nagar, Ghaziabad

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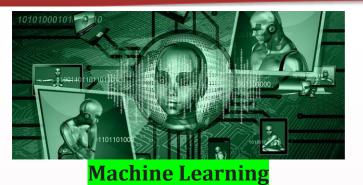
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Machine Learning is a booming research area across the globe. Advances in Machine Learning will make a big difference in many fields in the future. This is a vast area in which many types of algorithms are embedded. **Machine Learning** is the science of getting computers to act without being explicitly programmed.

The main difference between a human and a computer is - Humans learn from past experience while computers need to be told what to do. Computers need to be programmed so that they follow instructions. Making computers learn from past experience is called Machine Learning. For computers, past experience is nothing but data.

ML can be implemented with the help of algorithms. The machine learning algorithm is designed in such a way that it can predict some results based on inputs given. The more data we are going to give, the more accurate the prediction/ decision will be. The algorithms can work and process an infinite amount of data which human brains cannot do. With the advent of so-called 'Big Data', there are very large/ huge data sets available which are required for Machine Learning to be successful. In one way, we can say that Machine Learning is similar to Data Mining. The base core of ML is dependent on Mathematics. It actually relates to statistical analysis and iterative learning.

Some Real-time applications of Machine Learning are:

- Detecting Spam emails.
- Web Search and Recommendation Engines.
- Image and Speech Recognition.
- Medical Diagnosis.

#### **Machine Learning Techniques**

There are three techniques in Machine Learning. These techniques are used to build a Data Model which helps stakeholders make decisions related to business.

- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning

#### **Supervised Learning**

It is the most commonly used Technique among the three. In this kind of learning, the algorithm uses training data to find a link between input and output. This builds a model based on given inputs and output and gives a reasonable prediction for the new inputs. Here the training dataset is used to train the machine. This model is often used for systems like image recognition, speech recognition.

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Types of algorithms which come under supervised learning are :

#### Clustering

Clustering tries to group a set of objects and find whether there is some relationship between the objects.

#### **Association Rules (Pattern Detection)**

It is a rule-based machine learning for discovering interesting relationships between variables in large databases.

#### **Reinforcement Learning**

This is a type of Machine Learning which tells the computer if it has made the correct decision or not. With enough iterations, it will eventually be able to predict the correct outcomes.

#### List of common algorithms which are widely used in Machine Learning are :

- Linear Regression
- Naive Bayes Algorithms
- Decision Tree Algorithms
- Gradient Descent
- Neural Network
- Deep Learning Algorithms
- K-Means
- KNN (K Nearest Neighbors)
- Q Learning
- SVM (Support Vector Machine)

#### **Algorithm Selection**

It is very difficult to say which algorithm works best for the given problem. Sometimes just a trial and error method is followed. But to some extent, it can be decided based on the type and size of the data we are working with. We can go for machine learning when we have a complex task involving a large amount of data.

#### **Opportunities**

Giant companies like Google, Apple, Microsoft, Amazon are investing in ML as it is one of the booming research areas in many fields. So in the coming years, we will have many opportunities in Machine Learning. So it is better to learn to design algorithms by using either Python or R language.

#### Languages used to design an Algorithm for Machine Learning

There are many languages which are used to implement Machine Learning out of which two are widely used.

- *Python* Python is one of the best ways to getting started with Machine Learning as it is easy to learn and easy to read. It has some good Machine Learning libraries such as scikit-learn, pyML, and pybrain.
- *R* It is open source statistical programming language. The syntax is not easy to learn, but it is worth learning as it also has good Machine Learning Packages and Visualizations tools.

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### Text-to-speech apps that will read online articles to you

Sometimes, it is better to listen than to read. When you walk, ride, or drive, for example, it's safer to keep your eyes focused on the world around you. Text-to-speech (TTS) offers an alternative to listening to music, podcasts, or audiobooks. TTS can be a great way to catch up on articles you intend to read. For example, Mozilla's read later service, Pocket, includes the ability to listen to articles.

TTS solves a slightly different problem than the assistive voice capabilities available for the major platforms, such as Android TalkBack, iOS VoiceOver, Chromevox, Windows Narrator, and Mac VoiceOver. These tools typically read everything on a page—content plus navigation.

The following four TTS apps specialize in reading articles and documents you choose. While all of these apps provide text-to-speech capabilities, each app serves a slightly different set of needs. Some apps show the text as it is spoken, while others offer a variety of voices.

All of these apps work on iOS, and support the capability to share an article from the browser to the app via the native iOS sharing system functions. Importantly, as of July 2017, all four of these apps are under active development: The iOS app for each was updated in June or July 2017 at least once.

#### 1. Motoread (iOS, Chrome, and Safari desktop extensions)

Send an article to the app, then listen to saved articles later. There are Chrome and Safari extensions that let you add an article to your Motoread list from your desktop browser with a click. The app reads articles in a single voice, although you may adjust the playback speed. You can also choose to display the text of the article as you listen. The app is free, although you can upgrade (for \$1.99/month or \$19.99/year) to get the ability to add an unlimited number of articles.

#### 2. Voice Dream Reader (iOS, Android)

Voice Dream Reader shows the text of the article being read, and highlights each word as it is spoken. Since the app was originally developed as an assistive tool, you can adjust the size, font, spacing, and color of the text displayed during playback. Voice Dream supports adjustable playback speeds, and allows you to customize pause time between sentences, too. You can select from several system voices, and set a preferred speed, pitch, and volume for the voice. You can also add documents to listen to from Dropbox, Google Drive, Evernote, and other sources. Voice Dream Reader typically costs \$14.99, and a wide selection of additional voices are available for purchase, too—at a cost of up to \$4.99 per voice.

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#### 3. Speech Central (iOS, macOS, Windows, Android)

Speech Central works on more platforms than any of the other apps here, with apps available for iOS, macOS, Windows, and Android (although the app is available from Amazon, not the Google Play store). It also supports the ability to read text from other formats, such as Word, PDF, and more. On iOS, the app supports the system voices, although you can adjust the voice pitch, as well as the default 1x speed to be slightly faster or slower. Speech Central shows the text, with a subtle colored vertical line displayed along the left side of the text of the paragraph as it is spoken. The app will announce the calculated reading time for longer articles, which may be useful if you listen while traveling, and you can change playback speed (between .8x and 2x default speed). Speech Central also offers the ability to shuffle voices, so you don't have to listen to several articles in a row read with the same synthesized voice. The desktop platform apps are not free, at \$6.99 for macOS and \$9.99 for Windows 10, although the mobile apps are free, with an optional one-time \$4.99 upgrade that gives you the ability to add unlimited articles.

4. Audiobook Maker (iOS)

Audiobook Maker was the only app of the four to properly pronounce the words "live" and "livestream" with the default voice setting. All the other apps pronounced the four letter word "live" incorrectly for the context, as if it rhymed with "give." Audiobook Maker pronounced it correctly: "Live" rhymes with "hive." Audiobook Maker also was the only app with the option to display one word at a time, centred in the screen. It also offered an option to highlight the word being read, while showing the surrounding text, in an adjustable size font. As with other apps, you can adjust the speed, as well as select from several voices and languages. Audiobook Maker development is still in process. For example, the app also includes the ability to use your camera to take a photo of book pages to be read. But when I took a photo of a page from a book, I saw a "less than a minute remaining" message that never left. To be fair, the iOS app is named "Audiobook Maker - Early Adopters." That said, the core functionality of text-to-speech works and the app is free (as of July 2017).

#### Text to speech for developers

It is also never been easier to add text-to-speech capabilities to apps. Several large firms provide text-to-speech API services, such as Polly from Amazon, Bing Speech from Microsoft, and Text to Speech from IBM. There are smaller competitors in the field, like Responsive Voice, too. And search giants Google and Baidu have each released research papers that tout their progress toward increasingly natural sounding text-to-speech capabilities, called Deep WaveNet and Deep Voice 2, respectively.

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#### Is Crypto Currency Safe or Not?

Cryptojacking, a well-known word booming nowadays. It is the mining of cryptocurrency through the network of any cryptocurrency user.

Bitcoin was first used in 2009 for better online currency. Bitcoin user's increases day by day, but the crytocurrency was not aware of certain cryptojackers.

Cryptocurrency is being used by many companies and share market leaders. That is the only dangerous thing which can make the officials poor in just a minute or in year. The jackers take out some information when the currency user is online. Coinhive is the term used for the monero mining of cryptocurrency.

According to a Microsoft blog post on March 13, a large number of 644,000 computers were infected with crypto mining malware from the period of September 2017 to January 2018. The blog notifies that cryptojacking can come in many forms, like video streaming sites constructed with the only goal being cryptojacking, or tech support scam websites that are actually crypto miners.

Tesla's Amazon Web Service software container was jacked or cryptojacked due to a lack of password protection. A same case of cryptojacking took place in October 2017 at the Amazon Web Services of the companies Aviva and Gemalto.

Now what you need is "secured cryptocurrency", for this we must use several methods or recommendation given by the technology experts.

Firstly, we must be aware of online ads and software's, we must know how to get rid of them because it contains viruses. Secondly, we must use Ad blockers extension provided by chrome browser and opera. One option is to use, Opera web browser which blocks crypto mining scripts on both on its web and mobile versions as of this June.

Total of about 6000 miners are arrested in Russia for mining the information through the bitcoin user's profile. Always be alert while submitting your mails and such written documents because it can harm your business and your money in seconds of time. At last the answer is yes it safe when you take care of yourself while browsing something.



Vineet Moses Das Student Editor, VIBRANCE

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HYDRA-The Hacking Tool

Hydra is a very well-known and respected network log on cracker (password cracking tool) which can support many different services. The Hydra abbreviated to simply 'Hydra' is a hugely popular password cracker and has a very active and experienced development team. Essentially THC Hydra is a fast and stable Network Login Hacking Tool that will use dictionary or brute-force attacks to try various password and login combinations against an log in page. This hacking tool supports a wide set of protocols including Mail (POP3, IMAP, etc.), Databases, LDAP, SMB, VNC, and SSH. Take a look at John the Ripper as well.

#### How does HYDRA open the lock password safe?

Hydra is a brute force attack password cracking tool. In information security password cracking is the methodology of guessing passwords from databases that have been stored in or are in transit within a computer system or network.

Brute force just means that the program launches a relentless barrage of passwords at a log in to guess the password. As we know, the majority of users have weak passwords and all too often they are easily guessed. A little bit of social engineering and the chances of finding the correct password for a user are multiplied. Most people (especially those non-IT savvy, will base their 'secret' passwords on words and nouns that they will not easily forget. All of this is easily obtained through social media so as soon as the hacker has compiled this data it can be compiled within a 'password list'.

Hydra will take the list that the hacker built and will likely combine it with other known (easy passwords, such as 'password1, password2' etc.) and begin the attack. Depending on the processing speed of the hackers (auditors) computer, Internet connection (and perhaps proxies) the brute force methodology will systematically go through each password until the correct one is discovered.

#### How do we defend against Hydra\_attacks?

There are several ways a system admin or network engineer can defend against Hydra attacks. Here are a few methods:

- Disable or block access to accounts when a predetermined number of failed authentication attempts has been reached.
- Consider multi-factor or double opt-in/ log in for users.
- Consider implementing hardware-based security tokens in place of systemlevel passwords.
- Enforce all employees to use generated passwords or phrases and ensure every employee uses symbols whenever possible.
- And the most simple remove extremely sensitive data from the network, isolate it!

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#### How does HYDRA better with other Password crack- tool

Hydra is a fast network logon password cracking tool as compare to others tool . Moreover New Modules are easy to install in the tool. You can easily add modules and enhance the features. It is available for Windows, Linux, Free BSD, Solaris and OSX. This tool supports various network protocol as well which comparatively large as compared to other tool number including AFP, FTP, HTTP, HTPPS, Cisco enable in a very short period of time . This is why hydra consider to be the better, faster as well as amazing tool for password break in comparison to other tool.



Akash Aggarwal MCA-2<sup>nd</sup> Year

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### **Crypto Jacking**

Crypto jacking is a form of cyber-attack in which a hacker hijacks a target's processing power in order to mine cryptocurrency on the hacker's behalf.

#### BREAKING DOWN 'Crypto jacking'

Crypto jacking has become an increasingly popular way for bad actors to extract money from targets in the form of cryptocurrency. Widely publicized hacks such as the WannaCry worm, which affected systems on several continents in May 2017, encrypted victims' files and demanded cryptocurrency ransoms – bitcoin, in the case of WannaCry – in order to decrypt them.

Crypto jacking takes a different approach, harnessing victims' machines to "mine": perform the computations necessary to update cryptocurrencies' blockchains, creating new tokens and generating fees in the process. These new tokens and fees are deposited to wallets owned by the attacker, while the costs of mining – electricity and wear and tear to computers are borne by the victim.

#### **Examples of Crypto jacking Attacks**

In February 2018, a Spanish cybersecurity firm, Panda, wrote that a cyrptojacking scrypt known as WannaMine had spread to "computers around the world." The malware was being used to mine monero, a cryptocurrency that is notable for its ability to mine using CPUs (as opposed to GPUs or ASICs) while actually having some value in fiat terms.

Later the same month, governments in Britain, the U.S. and Canada were affected by a cryptojacking attack that took advantage of a vulnerability in a text-to-speech software embedded in many of these governments' sites. Attackers inserted Coinhive script into the software, allowing them to mine monero using visitors' browsers.

Browser mining is becoming an increasingly common practice. The lines between cryptojacking and legitimate practice are not always clear. Coinhive is often described as malware, but Salonrecently partnered with its developers to mine monero using visitors' browsers – with their permission – as a way of monetizing the outlet's content when faced with adblockers.

Some experts have cited the potential of browser mining as an alternative to ad-based monetization: in essence, legitimized cryptojacking. Such proposals are extremely controversial, given the potential costs to users in terms of power consumption and damage to hardware.

Later in February, it was revealed that Tesla Inc. had been the victim of cryptojacking when its Amazon Web Services software container was compromised. Similar attacks on companies have been reported going back to October 2017.

#### How can computers be safeguarded from being cryptojacked?

Most of the websites that have been found to use staelth to mine bitcoins on remote systems, use Coinhive. Despite the burgeoning processing power of handheld devices, **laptops** and desktops possess greater muscle to cruch the numbers required to solve hash functions for mining.

Here is a list of applications that could protect your computer from attacks by cryptojackers :

- 1. NoCoin
- 2. MalwareBytes
- 3. minerBlock



Prashant Kr. Jha MCA-2<sup>nd</sup> Year

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## Happening @ Department of 9.7 during January — March, 2018

### 5-days Workshop on OOPs & Java for MCA Students



Web Club of Department of I.T, I.T.S, Ghaziabad in association with CSI Student Branch @ I.T.S, Mohan Nagar, Ghaziabad conducted Five Days workshop from 16<sup>th</sup> January, 2018 to 20<sup>th</sup> January, 2018 for MCA-IV Semester students. Workshop covered the basic concepts of OOPs and Java .Session was interactive and the examples of the topic were practically demonstrated in the lab.

### MCA Students along with Faculty & Staff Members in "Kya Kehta Hain India" on Zee TV



In view of Celebrating the 69<sup>th</sup> Republic Day of the country, Faculty & Staff members of Department of I.T including Prof. Puja Dhar, Prof. Smita Kansal, Prof. Varun Arora and Ms. Babita Kapila along with the students of MCA had attended the Kavi Samelan " Kya Kehta Hain India" organized by ZEE NEWS at their ZEE Studio, Filmcity, Noida on 19th January,2018. Eight renowned Poets of the country including Dr. Hariom Pawar, Dr. Kunwar Bechain, Sh. Dinesh Raghuvanshi, Dr. Kirti Kale, Sh. Gajendra Solanki, Dr. Arjun Shishodia, Ms. Mumtaz Naseem and Ms. Padmini Sharma were present in this show. Students were filled with the patriotism during and after the show. All the poets had chanted their patriotic poems which was a true tribute to the Soldiers of India. This show was telecasted on 25th January, 2018opportunities.

### Special Session on "Knowledge Sharing and Experiential Learning by MCA Alumni

On Tuesday, 23rd January, 2018 a Special Session on "Knowledge Sharing and Experiential Learning" was



organized for MCA Students at I.T.S, Mohan Nagar, Ghaziabad. The Session was planned with an objective of providing an indepth discussion on employability skills. This was really a very informative and knowledge enriching session. In this session, MCA Alumni Batch 2005, Mr. Amit Sharma invited and Ms. Indrani Biswas were invited as Key resource Persons for this event. Mr. Amit Sharma shared his valuable thoughts and focused on communication and employability skills of Students. He also discussed about work culture of Startups and MNCs.

Ms. Indrani Biswas talked about importance of Soft Skills. Ms.

Indrani Biswas gave various tips to crack the interview. Further she suggested to each student "To make Interest as Strength" and also motivated students to focus on Technical skills as well as Behavioural Skills. This session was in the series of Invited talks by national speakers of repute by Dept. of IT of the institute with an objective to provide the detailed insight of the theme to the upcoming and working professionals about the technological, research and allied issues and experience sharing by leading experts and professionals. Mr. Amit Sharma and Ms. Indrani Biswas also interacted with the students and answered the queries raised during the session.

#### Inaugural of Swayam Prabha and NPTEL Local Chapter at I.T.S, Ghaziabad



An objective to provide alternative opportunity of learning and self-upgradation for Faculty and Students of IT Courses (MCA & BCA), Set-up for Swayam Prabha and NPTEL Local Chapter at I.T.S, Ghaziabad has been formed at the Institute on 24<sup>th</sup> January, 2018. This initiative will provide the students to select the online courses of their own interest through NPTEL and attend the sessions of their choice which will lead to Certification opportunities. This will help not only learning newer technologies and courses but will also help in improving there employability prospects.

NPTEL is an acronym for National Programme on Technology Enhanced Learning which is an initiative by seven Indian Institutes of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and Indian Institute of Science (IISc) for creating course contents in engineering and science.

The facility was inaugurated by Shri Arpit Chadha, Honorable Vice Chairman, I.T.S - The Education Group. Director IT, Dr. Sunil Kumar Pandey briefed about the NPTEL Local Chapter, type of courses offered by NPTEL. He also informed that Dr. Vidushi Singh has been designated as the SPOC - NPTEL Centre & Swayam Prabha Initiative and will coordinate the entire process and communication with NPTEL. Dr. Ajay Kumar, Director Management, Dr.

Vidya Sekhri ,Director-UG, Prof. Puja Dhar, MCA Chairperson, Prof. Smita Kansal, Cooddinator, MCA, Faculty members and MCA students were presented during inauguration session.

### Dot Net Club of Department of IT conducted a workshop on "Application Development using C#"



Dot Net Club in association with CSI-Student Branch at I.T.S, Mohan Nagar, Ghaziabad organized a Workshop on "Application Development using C#" on 27<sup>th</sup> January, 2018. Prof. Abhay Kumar Ray was the resource person of this workshop. Total 36 (Thirty Six) students of MCA final year participated in the workshop. This workshop was focused towards making the students aware & sharpening the skills on ASP.Net , ADO DOT Net ,T-SQL, Writing Stored Procedure ,Writing C# code to use Stored Procedure for better placement

### Experience Sharing Session on "MOOCS and New Age Teaching – Learning Pedagogies"



Department of IT organized an Experience Sharing Session on "MOOCS and New Age Teaching – Learning Pedagogies" on 29<sup>th</sup> January 2018 for MCA students .Prof. Satyaki Roy, National Coordinator, NPTEL, IIT Kanpur, Ms. Lalty Dutta, Project Manager, NPTEL, IIT Kanpur, Ms. Angana Sengupta, Coordinator, Local Chapter, IIT Kanpur were eminent guest for the session.

Before beginning the session, Prof. Satyaki Roy, Ms. Lalty Dutta, and Ms. Angana Sengupta were warmly welcomed by Dr. Sunil Kr Pandey, Director-IT. While addressing Director-IT, Dr. Sunil Kumar

Pandey communicated about need of learning beyond classroom and how MOOC and New Age Teaching Pedagogies are helpful to the students in this requirement.

Prof. Satyaki Roy briefed about details of NPTEL, how and when it has been formed, before it was planned to just deliver video lectures, later on it has been shifted to online certification. He also briefed about achievements of NPTEL till date like 30,000+ video hours, 371+million NPTEL website view, 271+ million you tube views etc. He also shared the statistics of number of students and faculty participation from initial years to Dec 2017. He also communicated students how these courses helps them in their placements. After the session, the Team Members also interacted with the faculty members of Department of IT and answered the queries related with NPTEL online course during the session.

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### Department of IT Celebrated Guru Ravidas Jyanti on 31<sup>st</sup> January, 2018



Guru Ravidas was a mystic saint-poet, philosopher, poet, social reformer of the North Indian Bhakti movement. He is said to be the founder of 21<sup>st</sup> Centuary's Ravidassia religion. He wrote various devotional songs and verses. 41 of his popular songs and poems are also written in Guru Granth Sahib.

Department of I.T., I.T.S, Mohan Nagar, Ghaziabad celebrated Guru Ravidas Jyanti on 31<sup>st</sup> January, 2018. While addressing the students, Director-IT, Dr. Sunil Kr. Pandey said that we should not forget the contributions of the Saints like Guru Ravidas for his country. He played a pivotal role in preaching social harmony and stood against caste discrimination and social injustice.

MCA-Chairperson, Prof. Puja Dhar appreciated all the students who on a very short notice had prepared for this occasion with their poems and details about Guru Ravidas. Prof. Smita Kansal, Coordinator-MCA also appreciated all the students who participated on this occasion and said that we should feel proud on the saints like Guru Ravidas. Other Faculty members including Dr. Umang Singh and Dr. Vidushi Singh also shared their words about Guru Ravidas.

### C Club conducted Workshop on "C Programming"



C Club of Department of IT, in association with CSI Student Branch @ I.T.S, conducted a half-day workshop on "C Programming" for MCA. The objective of this workshop was to prepare students to code better by understanding programming best practices.

The workshop was taken by Prof. Chandra Mani Sharma. He started the workshop with an interesting analogy of natural languages with programming languages. He explained the basic concepts of C programming including Data Types, Operators, Conditional Statements, Loops, Arrays, Pointers and Functions. Further, it was demonstrated in the workshop how to develop logic out of given

problem and how to use different programming constructs to write the program. The participants practiced these concepts in the lab and found it very useful. The workshop completed with lots of learning!

#### Dr. T.V Vijay Kumar, Professor, JNU conducted Guest Talk for MCA Students

An invited talk by Eminent Speaker, Dr. T. V. Vijay Kumar, Professor, School of Computer Systems Sciences, JNU Delhi" was organized on 3<sup>rd</sup> February, 2018, at I.T.S, Mohan Nagar, Ghaziabad. Before starting of the session, Prof. T. V. Vijay Kumar was warmly welcomed by Dr. Sunil Kr Pandey ,Director IT. Dr. Umang presented a brief about the Session and introduced Prof. T.V. Vijay Kumar with audience.

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In this session, Prof. T. V. Vijay Kumar delivered talk on "Big Data & Hadoop". The session included discussions on chronological evolution of Databases to Big Data, concepts of Heterogeneity, Autonomy, Architectural Models, Semantic &Syntactic Heterogeneity, Ontology Based Data Integration, Data Mining and Web Mining, Clustering, Data Stream Management and deep insight of Analytics and its different variations. This event was in the series of Invited talks by national speakers of repute by Dept. of IT of the institute with an objective to provide the detailed insight of



the latest developments in technology, research issues and futuristic development. Prof. T.V. Vijay Kumar also interacted with the faculties and answered the queries related with research& applications. raised during the session. It was overall learning and knowledge sharing session for participating students & faculty.

### Innovative Ideas Infotech in association with Dr. APJ Abdul Kalam Technical University and UP Police conducted 2-days workshop on "Cyber Security"

Innovative Ideas Infotech is the largest NGO working on Cyber Security across country. The organization conducts workshop on cyber security and are also officially associated with UP Police. They have conducted sessions at the leading institutions across country including the IITs, IIITs, IIMs and now wish to conduct such a workshop in our institute too. Department of I.T. organized two-days' workshop on "Cyber Security". The prime objective of this



workshop was to eradicate cybercrime and making people aware about the threats and flaws of the e-World. To eradicate the emerging Cyber Crimes AKTU had given the responsibility to Innovative Ideas Infotech to conduct a free workshop on Cyber Security in our institute for our MCA/ BCA and MBA students on 12<sup>th</sup> February, 2018.

While addressing the students Director-IT, Dr. Sunil Kr. Pandey said that nowadays we are living in a cyber space and we cannot avoid the usage of internet, so it is every body's moral responsibility to be aware of cybercrime and its implications.

Dr. Vidhya Sekri, Director-UG campus also shared her views in this session. She also said that we should take proper care while sharing our details on the internet via social networking sites or e-banking. Director-Management, Dr. Ajay Kumar, MCA Chairperson, Prof. Puja Dhar, MCA Coordinator, Prof. Smita Kansal and other faculty members of Department of I.T. were also present during the session.

Mr. Rahul Mishra, Cyber Security Adviser of UP Police was the speaker of the session. During the session he covered all the latest Cyber Crimes going on in the digital world like ATM Card fraud, ATM Card cloning, Call spoofing, Mail spoofing and various other latest Cyber Crimes. The session was full of awareness about such crimes and was helpful to eradicate the Cyber Crimes. First day the session was free of cost and based of the interest of the students he conducted the certification course of worth Rs. 700/- on second day. Today 82 students of MCA/MBA and BCA had participated on the second day. They were also awarded by the Certificate of Participation.

### Industrial Visit to AMD, Virtual Reality Research Centre for MCA Students

Department of I.T. had organized one day educational visit for MCA students to AMD, Virtual Reality Research Centre, New Delhi on 16<sup>th</sup> February, 2018. The objective of this visit was to make students and faculty members aware about the implementation of Virtual Reality in various sectors like automobiles, games, Film industry, Academics and many more fields.

It was a full day visit. Total 32 students of MCA had visited AMD, Virtual Reality Research Centre along with Director (IT), Dr. Sunil Kr. Pandey, Chairperson-MCA, Prof. Puja Dhar, Coordinator-MCA, Prof. Smita Kansal, Dr. Umang Singh and Prof. Chandra Mani



Sharma. Students had enjoyed the visit and have also learnt about many new innovations by AMD and HP towards Digital India Mission.

### Java Club conducted a workshop on "Java Technologies" for MCA & BCA Students

On 16<sup>th</sup> February, 2018 ,Java Club of Department of IT had conducted a workshop on Java technologies, Java Core Concepts, Overview of J2EE, JSP, with concept MVC was conducted for MCA and BCA students . The workshop was



aimed to provide concepts of OOS and core java including elaboration of components of J2EE.

The workshop was continued with overview of MVC architecture and its importance in web project development in real life projects. The programming basics of JSP with MVC models were also discussed followed by hands on by the students. Students were given a glimpse development of login module in JSP and JDBC. In that students were explained the front end and backend(database) connectivity code and uses of jar files for the thin connection(Type-IV JDBC). The workshop

was concluded with a java quiz. Winners were also awarded with certificate and one Book.

### DBMS Club of Department of IT organized a workshop on "Implementation of SQL" for MCA Students



DBMS Club of Department of IT invited Mr. Manjeet Singh, Team Lead, GSPANN Tech Inc. for conducting a workshop on "Implementation of SQL" on 17<sup>th</sup> February, 2018, at I.T.S, Mohan Nagar, Ghaziabad. Before starting of the session, Mr. Manjeet Singh was warmly welcomed by Dr. Sunil Kr Pandey Director IT, by presented him a Sapling.

While addressing the students Mr. Manjeet explained how to use SQL commands to retrieve information from the Database. He explained select command with where, group by, having, order by,

distinct, all, unique conditions. He discussed about sequence execution of these commands in processor i.e. firstly 'from' statement is executed then 'where' condition then 'group by' condition then 'having' then 'select' statement is executed then 'order by' after that distinct/unique. He also gave different assignments to the students which they solved in the lab during the workshop. Students were very happy with the session.

### A Guest Talk on "Self Confidence/Reliance and Motivation: Towards Bright Future" for MCA Students

Department of I.T. organized a Guest Session on "Self Confidence/Reliance and Motivation: Towards Bright Future" on 20<sup>th</sup> February ,2018 for MCA-IV Semester Students. Dr. Sujata Menon Kapila, Founder, Joyful Living was the resource person for this session. The objective of this talk was to make students more confident and self-reliance



so that they can achieve success in their life easily. Dr. Sujata talked about super conscious, conscious and sub conscious minds. Faculty members and students were requested to do 6 Super Conscious Living Exercises with the help of Ms. Malvika. While addressing the students, Dr. Sujata discussed with the students that they should take care of four things in their life (i) Keep body healthy (ii) Have a good control of emotions (iii) Set goals in life (start with smaller goals and work rigorously to achieve those goals) (iv) Stop Expectations . We have to be gratitude in our life for the things which we are having.

She also briefed students about importance of affirmation and manifestation. She communicated to the students that "Visualize your goals and start living with these goals, write it down in a piece of paper and keep this into practice" by doing honest effort and manifestation you will do wonders in your life.

### Mr Amitabh Verma , Director India, Caipos @ I.T.S, Ghaziabad for a Special Session

MCA Alumni ,Mr. Amitabh Verma , Director India, Caipos conducted a Knowledge Sharing Session for the students

of MCA on 21<sup>st</sup> February ,2018 at I.T.S, Mohan Nagar, Ghaziabad. The session began with welcome of guest by Dr. Sunil Kr Pandey ,Director-IT by presented him a Sapling. While addressing the gathering, Director-IT,

Dr. Sunil Kr. Pandey discussed about the importance of "Information learning & knowledge sharing" session and how this session would be beneficial for MCA Students in their bright future.

In this session, Mr. Amitabh Verma discussed about cloud computing and its related applications. He discussed about technology

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	Director, Calposindia
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transformation since last twenty years and presented a focused discussion on Career options in Jobs Profiles. He suggested students to focus on technical as well as interpersonal skills. This was an interactive & knowledge enriching session.

### Industrial visit of MCA Students to Mother Dairy, New Delhi



Department of I.T. organized one day Industry visit for the students of MCA to the Mother Dairy, New Delhi on 14<sup>th</sup> March, 2018. In the beginning of the visit Mr. R. S Pilay, Manager, PR, Mother Dairy explained about the Mother Dairy. He said that Mother Dairy was commissioned in 1974 as a wholly owned subsidiary of the National Dairy Development Board (NDDB). He also said that Safal, F&V arm of Mother Dairy was the first Company to organize the fruits and vegetables business in India. Today Safal is the market leader in organized fruit & vegetable retail business in Delhi NCR and operates the largest number of F&V Stores in Delhi NCR and has significant presence in Bangalore. Safal was also the first brand in India to launch frozen vegetable in mid 90s. Over the years, the brand has gained significant customer support and has become a household brand with market leadership and presence across the country.

After his session students were taken to the zone where actual processing is done , he also explained the working of each chamber. Then students were shown some of the tests which Mother Dairy perform before delivering the milk to its customers. There are total 25 tests which are performed on the milk so that it is safely delivered to the people.

Some of Faculty and staff Members of Department of I.T. including Prof. Puja Dhar, Prof. Smita Kansal, Prof. Saurabh Saxena, Prof. Varun Arora, Prof. Chandramani Sharma and Ms. Babita had also accompanied the students. At the end of the visit students were served with Glass of Fresh Milk and Ice Creams. Students enjoyed the whole visit and were also aware about the process of Mother Dairy

### Dr. Sunil Kr Pandey, Director (IT) is awarded with Big CIO Award-2018

Dr. Sunil Kr Pandey, Director (IT) is awarded with Big CIO Award-2018 in the event "BIG CIO Summit & Awards – 2018" organized at Hotel Leela, Mumbai during 14<sup>th</sup> & 15<sup>th</sup> March, 2018. This award was given by Trescon Global and supported by leading IT and Telecom companies. This award is conferred by TRESCON GLOBAL to IT Industry Professionals. On this occasion many globally renowned experts and leading IT Professionals including Ms. Danielle Di-Masi, Global Innovator & Media Commentator, The Interactions Lab PTY LTD, Sydney,



Australia, Dr. Satyam Priyadarshy, Chief Data Scientist - Halliburton, Mr. Nikhil Desai, International Speaker & Motivator, Mr. Ganpati Dandpani, Global Digital Transformation Leader & Global CIO - TVS, Mohd. Saleem, CEO - Trescon Global and over 250 CEOs, CIOs/ CTOs, CISOs of leading Companies.

### JAVA Club activity "SANRACHNA" for MCA and BCA Students



Java Club organized its intra institutional Java Programming Contest "SANRACHNA-2018" for MCA and BCA students on 16<sup>th</sup> March, 2018. The event was an on the spot Java programming contest, which consists of one round which comprised of on the spot Java programming. Based on the performance of students in this round, the winners of contest were shortlisted. Students were given two simple logical programs for displaying specific output and on the basis of performance top three students were awarded with certificate and a valuable MCQ book on

C,C++ and Java. Amit Kashyap, MCA-IV Semester, Sharddha Gupta, MCA-IV Semester and Prashant Panchal, BCA, 3<sup>rd</sup> year stood First, Second and Third respectively in the contest.

### Students of MCA along with Faculty Members in Zee Studio



Faculty members of Department of I.T. including Dr. Vidushi Singh and Prof.Smita Kansal along with students of MCA had attended " Kya Kehta Hai India" organized by ZEE NEWS at their ZEE Studio, Film City, Noida on 23<sup>rd</sup> March, 2018. Five renowned personalities of Indian Politics and representative of different religion of the country Mr. Sudhanshu Trivedi, Mr. Dushyant Nagar, Mr. John Dayal, Prof. Rajnish Kumar Shukla. Ms. Diya Vandna Sharma, representative of Lingayat Dharm, Singer Shankar Sahni and

renowned dance artist Mr. Mohan who was dressed in the form of Shiva were present in this show. Topic of the discussion was "Lingayat should become a separate Dharm or not?" Dance artist has started the debate as Shiva by asking question that "Any Government or party can make a Dharm?" to the penalist. Debate was very interesting as all the panelist were experts of their domain. In between Singer Mr. Shankar Shahni sung Maha Mrutyunjay Mantra and Shiv Bhajans and Shiva performed Tandav also. Students were filled with energy and knowledge during and after the show. This show was telecasted on 24<sup>th</sup> and 25<sup>th</sup> March, 2018.

### Special Session on "Campus to Corporate" for MCA Students



On 23<sup>rd</sup> March, 2018 a Special Session by Mr. Suneel Keswani, was organized by Department of IT at I.T.S, Mohan Nagar, Ghaziabad. While welcoming, Mr. Suneel Keswani ,Director-IT, Dr. Sunil Kr. Pandey discussed on the theme of session "Campus to Corporate" and how this session would be beneficial for MCA Students in their bright future. Mr. Keswani urged on the students that they need to follow some simple steps in their life including be on time, be

participative, be well dressed as per the occasion, always celebrate with joy and happiness, express your skills, be Confident, stretch yourself mentally, physically, emotionally; don't limit yourself, be optimistic even when you have failed and be focused. He also performed some activities along with real life examples. He engaged all the MCA Students and involved them throughout the session. According to him, Students should understand concept behind core knowledge and general knowledge. His word really motivated the students present He closed his

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lecture saying "Failing is not the worst thing in life but quitting is most dangerous". This was an interactive & knowledge enriching session. Dr. Umang, Coordinator of this session, concluded the session and delivered vote of thanks. It was informative and learning session for all participating MCA Students.

### PARAMARSH-2018, a career counselling Session conducted for BCA Students



The second session of PARAMARSH-2018 a career counseling session was organized on Saturday, 24<sup>th</sup> March 2018. The objective of this session was an interaction amongst students of BCA final year of ITS-UG Campus and the MCA alumni from industry. 22 students of BCA VI semester, and 05 ITS-MCA and BCA alumni including Mr. Rishi Srivastava (BCA-2002), HCL, Prof. Charndramani Sharma (MCA 2007),I.T.S, Ms. Yukti Chopra (MCA-2011), Mercer,Mr. Gautam Bagga (MCA-2012) Wipro Pvt. Ltd. ,and Ms. Manisha (MCA-2015), IBM were the expert panelists in this session.

Director-IT, Dr. Sunil Kr. Pandey he also said that these sessions are very important for the undergraduate students. This is the stage when they have to take the important decision regarding their career and we are fortunate to have direct connect with our MCA & BCA Alumni who are always ready to guide their almamater. Vice Principal, UG Campus, Prof. Nancy Sharma also encouraged students to clear their doubts regarding the choice of their career. She also said that students should get benefit from these types of sessions organized by Department of I.T.

After that MCA-Chairperson, Prof. Puja Dhar started the session by asking the panelists to share their experiences with the students. She also encouraged students to come up with their questions, doubts and other issues that they would be having regarding their future & career options. BCA-Chairperson, Prof. Richa Singh also encouraged students to ask their queries.

During the session many of the BCA VI Semester students interacted and asked lots of queries which were addressed by the Alumni. Alumni present, shared their own experiences and advised the students to stick on core fundamentals of the subjects, understand their strengths & interest and accordingly plan for their future. Students were very happy with the session.

MCA Coordinator, Prof. Smita Kansal, Alumni Coordinator(MCA), Dr. Umang Singh and BCA Final year Coordinator, Prof. Megha Sharma was also present in the session. At the end of this session feedback for the students were also taken. Overall the session was very interactive and students were happy to get answered about their doubts regarding choosing their career options.

### One day workshop on "Data Science using Python"

Department of IT, I.T.S Mohan Nagar, Ghaziabad conducted one day workshop on "Data Science using Python" on 24<sup>th</sup> March, 2018 for MCA and BCA students of the Institute. The coordinators and resource persons of the workshop were Prof. Chandra Mani Sharma & Prof. Varun Arora. The workshop was formally inaugurated in the benign presence of Director IT, Dr. Sunil Kr Pandey; Chairperson MCA, Prof Puja Dhar; Coordinator MCA, Prof. Smita Kansal and other faculty members of Department of IT.

In his opening address, Director-IT, Dr. Sunil Kr Pandey motivated and sensitized the participants for the importance of Data Science in today's time. He started with historical evolution of very concept of Data and various operations on it in early days of DBMS and lateron in the era of Data Warehousing. He kept on touching the avenues of Big Data Analytics and Data Science. Subsequently, Prof Chandra Mani Sharma conducted three sessions on Data Science

with hands-on practice on Data Science. Prof Sharma gave and aerial overview of basic programming concepts in Python including Data Structures, conditional statements, loops, creation of modules and Anaconda environment. He also discussed about various packages for Data Science including numpy, scipy, matplotlib, pandas, sklearn etc., were discussed with code examples. Session also had the demonstration and applications of Python for data visualization and analytics. This session also had open Q/A, wherein participants had their queries answered on various aspects of Data Science such as career prospects, where to move next etc. At the end of the workshop, each participant received the Certification of Participation from the dignitaries. Each participant appreciated the worthiness of the workshop and took away some food for thought.

#### Workshop on "Internet of Things" for MCA Students

On 29<sup>th</sup> March, 2018 ,Department of I.T. in association with CSI Student Branch @ ITS conducted a full day workshop on "Internet of Things" for the MCA students Prof. Abhay Kumar Ray and Prof. Smita Kansal were the key resource person for this workshop. The Objective of this workshop was to help the students to understand and take better use of the Arduino Uno, components of Arduino Uno, Application of different sensors , Integration of sensors to the Ardunio chip, Program writing ,development and implementation of application using Arduino Chip and different sensors. Session based on Introduction and application of Arduino chip and sensors was conducted in Lecture cum Discussion mode. Rest of the

session was conducted in the Computer Lab by live demonstration of each of the topic.





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### **Record/ Awards and Achievements of I.T.S**

### Name of I.T.S-The Education Group now in Guinness Book of World Records



I.T.S - The Education Group is new Record Holder for the "Guinness Book of World Record" for Highest Number of People Using Mouthwash at same time at Multiple Venues. This attempt was evaluated, monitored and assessed under strict guidelines of Guinness World Record in presence of their representative. For information to you all, the entire process of Bar Code Scanning for entry & entry process of Participants at the Venue was under strict monitoring on Real Time Basis for entire process, the entire proceedings was Live for assessment by Guinness Representatives on Internet and simultaneously through Satellite (by Out door Broadcasting - OB Van Up-linking from Mohan Nagar & Greater Noida and Down Linking at Murad Nagar), Use of Drone Camera. After announcement of successful attempt of ours, The Certificate of Achievement was handed over to Honorable Chairman, I.T.S - The Education Group, Dr. R.P. Chadha, Vice Chairman, I.T.S-The Education Group, Shri Arpit Chadha and Lady Vice Chairman, I.T.S-The Education Group, Ms. Latika Chadha Madam at Murad Nagar Campus.

### Prime Accreditation Approval by International Accreditation Organization (IAO), USA

I.T.S Ghaziabad has been successfully approved by the internationally certified evaluation commission after the conduct of full day audit of IAO's Evaluation Commission on 7<sup>th</sup> February, 2018. I.T.S, Ghaziabad is one of the very few applicants whose accreditation has been approved by the committee members based on the physical verification by the IAO's representative and subsequent documentation review. I.T.S has been found eligible for Prime Accreditation.



## Faculty Participation in External Events

Date	Faculty	Events
8 <sup>th</sup> January, 2018	Prof. Abhay N Tripathi	Attended 14 <sup>th</sup> Auto Expo 2018,at Pragati Maidan, Delhi
19 <sup>th</sup> – 21 <sup>st</sup> January, 2018	Dr. Sunil Kr Pandey	Attended Annual CSI Convention and national conference on "Social Transformation – Digital way"
22 <sup>nd</sup> January, 2018	Dr. Sunil Kr Pandey	Attended AWS Education meet-up- Campus on cloud at Amazon
30 <sup>th</sup> January, 2018	Dr. Vidushi Singh	Attended SPOC felicitation workshop at IIT Kanpur outstretch, Centre Noida
23 <sup>rd</sup> - 24 <sup>th</sup> February 2018.	Prof. K.P.Singh	Presented paper in IEEE International Conference
6 <sup>th</sup> March, 2018	Prof. Puja Dhar	Attended one day Seminar organized by ManageEngine a division of Zoho Corp. at Shangri-La Eros Hotel, New Delhi
9 <sup>th</sup> -10 <sup>th</sup> March 2018	Dr. Umang Singh and Prof. Smita Kansal	Attended workshop on "Evalutionary Algorithms and applications" at SAU New Delhi
14 <sup>th</sup> -16 <sup>th</sup> March, 2018	Dr. Sunil Kr. Pandey	Chaired a Technical Session in International Conference on "Computing for Sustainable Global Development" organized at BVICAM, New Delhi
14 <sup>th</sup> -16 <sup>th</sup> March, 2018	Dr. Umang	Chaired a Technical Session in International Conference on "Computing for Sustainable Global Development" organized at BVICAM, New Delhi

### **Student Participation in External Events**

Date	Student Name	Events
8 <sup>th</sup> January, 2018	Prof. A.N. Tripathi along with MCA	Attended 14 <sup>th</sup> Auto Expo 2018 at Pagati
	students	Maidan New Delhi
19th January,2018	Prof. Puja Dhar, Prof. Smita Kansal	Attended the Kavi Samelan "Kya Kehta
	and Prof. Varun Arora along with the	Hain India" at ZEE Studio, Film city,
	MCA students	Noida
8 <sup>th</sup> February, 2018	MCA 2 <sup>nd</sup> year Students - Shweta	Participated in Annual Budget Conclave
0 1 Condary, 2010	Chaudhary, Pooja, Anukriti, Pallavi,	2018 at AKGIM
	Kashish, Shweta, Shraddha, Prashant	
	and Vineet Moses	
21 <sup>st</sup> February, 2018	MCA Students - Anukriti, Pallavi,	Participated in Annual Management
21 Tebruary, 2010	Nagma, Abhishek, Shraddha Gupta,	Meet and won first Prize at AKGIM,
	and Prashant Kr Jha	Ghaziabad
14 <sup>th</sup> March, 2018	MCA Students along with Faculty	Industrial visit for MCA students to
14 Watch, 2010	Members	Mother Diary
23 <sup>rd</sup> – 24 <sup>th</sup> March, 2018	MCA 2 <sup>nd</sup> year Students- Shraddha,	Participated in Literary & Cultural Fest
23 - 24 Watch, 2018	Anukriti, Vineet, Prashant Kr Jha and	"Udghosh 2018" organized at I.T.S.
	Manish Kumar	Engineering College, Greater Noida

### **Announcement and Contact Details**

VIBRANCE is an E-Newsletter of Department of I.T, I.T.S, Ghaziabad. We look forward to the contribution from our students, alumni, faculty members and industry experts.

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