

## DATA INSIGHTS

### Part I- Exploratory Data Analysis

--- RASHAAD MIRZA

Data analytics is the science of analyzing raw data to make conclusions about that information. Data analytics help to optimize business and add value to its performance. It can succor by influencing decisions and drive change.

To give a rundown of the subject to the students, Computer Society of India MJCET held its first workshop for the academic year 2021-22 on Saturday, December 4, at the Microsoft Lab, MJCET. Scheduled at 10:30, the six-hour workshop, titled Part I – Exploratory Data Analysis, was the first segment of CSI-MJCET's three-part series called Data Insights. The workshop was led by Mr. Syed Kareem Ullah Hussaini, a Data Engineer at Deloitte.

The workshop proved to be an insightful one for the 60+ attendees, and offered them an opportunity to have a gateway into Data Science. Fast-paced and direct, this workshop was designed to be an ideal companion for data science beginners, providing an engaging step-by-step approach to understanding Data Science.

He went on to unravel Data Science for the curious audience and grasped onto their attention with his interesting and informative presentation. Moreover, he also interacted with the students and answered a range of questions.

Later, the audience engaged in a hands-on session with the guest speaker, which helped them get equipped with relevant skills, like a data scientist, learning along the way from real examples that lead to real results.

FROM THE  
DIRECTOR'S  
DESK

" .. the first step towards excellence is to strive for it."

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FROM THE  
PRINCIPAL'S  
DESK

" .. research papers have become a necessity before applying to foreign universities or getting a job."

[Read more on page 6](#)



A competition was also organized for the young audience. They participated with enthusiasm to produce the best insights for given data sets. The winners of this competition were handed prizes by the guest speaker. The workshop concluded with a vote of thanks by Rashaad Mirza.

# WEB-DEV WORKSHOP 2021: A HANDS-ON EXPERIENCE FOR BEGINNERS

--- AYESHA SARFARAZ

For a novice in the realm of development, web development can be the perfect stepping-stone. Learning web development involves mastering a variety of skills, tools and technologies, which can be overwhelming for a beginner. With the aim of familiarizing students through a hands-on experience with the foundations of front-end web development, CSI organized the Web-Dev: No Way Home workshop on the 18th of December. It was led by the Tech and Web Teams of CSI, who were present to guide students along every step of the way. Open to all irrespective of year and branch, the event was attended by over 70 students. The event kicked off at 11 am, with Ammarah and Zubair of CSI giving the students an introduction to the basics of front-end development: HTML, CSS and JavaScript.

To help the students have a more immersive and practical learning experience, a fun contest was held to see which student would design the best page using all the information they had just learnt. Helping the students navigate this challenge by checking code and answering their queries were CSI members Naheed, Habeebullah, Mehvash, Areeba and several other volunteers.

The webpage contest came to an end at around 3 30 pm and after carefully judging and observing the students' pages, the Tech and Web teams decided upon a winner and two runners-up. To award the best pages and to encourage the spirit of learning, cash prizes were given to the winners Farhan Shakeel, Aamer Aijaz Ahmed and Isra Sayeeda. The event concluded with the organizers thanking the students for their enthusiastic participation and for spending their day learning and taking on new challenges

## UNLOCKING YOUR FULL POTENTIAL: A CIAO TO PRODUCTIVITY

--- MOHD SAADULLAH

A seminar titled "Unlocking Your Full Potential", was organized by the CSE Department in collaboration with CSI-MJCET at Main Seminar Hall on 8th November 2021. In this seminar, Mr. Moid Ahmed, Partner at McKinsey & Company, addressed the gathering and elaborately guided the audience. This seminar was honored by the presence of Mr. Syed Basharat Ali from the CETI foundation and managed by Asst. Prof. Mr. Zainuddin Naveed sir and Prof. Mrs. Maniza Hijab.

Being an alumnus of MJCET, sir began his speech by reminiscing his time in this college and the journey he went through the years. Later, Mr. Moid spoke about leading a productive college life and the skillsets required to become successful in the future. Students were encouraged not to underestimate themselves and find their true potential to achieve their goals. Lastly, the speaker concluded by giving a detailed lecture on how one can unlock their full potential and thrive in years to come.



Mr. Moid's speech ignited that spark in students to dream more, unlock their full potential, and achieve more. Later, the inspired students interacted one-on-one with the speaker in a Q&A session. The speaker himself was amazed by the response and queries of young minds, which assured the success of this seminar. Also, the guest lecture was preceded by a short motivational talk by Mr. Syed Basharat Ali of the CETI Foundation. Sir concurred with Mr. Moid's advice at the end and shared his two cents on the journey to unlock the full potential. Mr. Basharat then concluded by encouraging students to take mentorship programs and the vote of thanks was given by Areeba Mohiuddin, the chief coordinator of CSI-MJCET.

# MJCET CONDUCTS INDUCTION PROGRAM 2021: IN HOPE OF AN ADIEU TO THE PANDEMIC

--- MASRATH SULTANA

Induction programs are conducted to familiarise the freshers regarding the functioning of the college and get the details of how the next four years will look like in a nutshell. After a pandemic-struck batch who didn't experience the program in 2020, it's been a great feeling and time to start things afresh as a team and lead the students for their new beginnings. The approaches towards life have changed for sure; the same goes for college too. Along with the academic schedules to follow, students, especially freshers, are encouraged to start their side hustle or skill development to graduate as complete students with both practical and theoretical approaches.

The induction program started on 29th November 2021 and continued for a week as the new variant of Coronavirus began to show its signs across the globe. The college along with the faculty members and students ensured that basic protocols like wearing masks, using sanitizers, and maintaining social distancing, are followed. This program is usually a joint approach of the students and the faculty members in planning, laying out, and facilitating the transitioning of their school to college life. Other aspects of this program were encouraging students to have a positive outlook on life and work hard to achieve their goals and many renowned speakers came into the limelight to share their success as well as failure stories.



CSI MJCET had another wonderful Induction session in which they introduced themselves to around 800 students speaking about their society and how CSI works as a team. Many aspects including the team members' journey, events conducted in previous years, projects, CSI Bulletin, and the overall perks of CSI were highlighted in this session. While Areeba and Mehvash presented the introduction of CSI's mission and vision, projects were handled by Razeena and Arafath.

Various activities and events were presented by Rashaad and Zubair while the Editorial and experience as a student in CSI were shared by Saad.

Overall, stepping into college life is always a new and exciting journey in itself. By the end of the Induction Program, the freshers are encouraged to be fit, intelligent both in the academic area and the extracurricular activities to turn out to be overall achievers.

# 3D Printed Food - A Revolution in the Food Industry

--- MASRATH SULTANA

Three-dimensional food can now be designed according to their nutritional values and all the desired textures. The basic idea of 3D printer is to take the material (in this case edible mass) and use extruders to extrude the mass through a nozzle. This concept has been in existence since the early 2000s but was not much recognized until people started seeing the wonders it can do in the various non-conventional industries. This technology came in spotlight when a “3D Printed Steak” was introduced and people started going bonkers on how such a technology can provide us with the flesh of an animal. This encouraged many consumers to seek such edibles which are not even harming animals but creating one completely by using plant-based product.

The question arises now is “How?”. The 3D printer has been used for ages to print metal, plastic, concrete in civil constructions, etc. The 3D printer as mentioned will input the required material and output it through the nozzles present on the printer using the G-Code that will guide them making the desired shapes and sizes. Another industry where 3D printing technology is widely used in the current times is for the chocolates – the chocolate factories use cartridges that hold chocolate piping out your favorite person’s name, making intricate details and decorating the dessert.

The 3D printing food market is expected to rise exponentially by the year 2025 according to various sources. The peak time for this technology is now, with many biodegradable products in the making. The goal of many companies is to now integrate 3D printing technology for food industries and soon try to make a 4D printer using 3D printer and add another degree of freedom for cooking the edible printed matter.

# Building an Inclusive Society with Technology

--- AYESHA SARFARAZ

With the pandemic bringing upon us an age of remote work, society has become more reliant on technology than perhaps ever before, which also implies a growing digital divide for those with disabilities. It has been estimated that less than 10% of websites are accessible to the disabled, who require audio assistance and suitable display settings to use web pages. However, innovative companies are making strides in building a more accessible society with digital tools designed to be used by anybody regardless of ability.

The BlindSquare app developed by Finland-based Ilkka Pirttimaa uses technology to help visually impaired people explore independently. The app provides audio prompts to the visually impaired to help them navigate streets and neighborhoods around them. Used by more than 60,000 people in 186 countries and available in 26 languages, the app utilizes Open Street Map, an open-source geographic database of the world, along with data from Foursquare, a location verifying platform. It determines users’ locations and provides audio information about nearby cafes, libraries, grocery stores. Users can shake their devices to hear their current location, details about the nearest intersection and venues around them, as well as travel progress.

The app can also be used by visually and hearing impaired people, as it can connect to Braille displays that can be used in place of the speech synthesizer. According to Pirttimaa, accessibility features like these should be a best practice for all developers and not just a supplementary feature.

# THE ASCENT OF CLOUD COMPUTING

--- MOIZUDDIN ZEESHAN

As the world was busy dealing with one of the most severe recessions of the century, a revolution was underway in computing. A revolution that was capable of shaking the foundations of how technology is being delivered to all organizations. This revolution was nothing else than Cloud Computing and the structure of the knowledge economy was reshaped by it.

Cloud computing is on-demand access, via the internet, to computing resources—applications, servers (physical servers and virtual servers), data storage, development tools, networking capabilities, and more—hosted at a remote data centre managed by a cloud services provider (or CSP).

Presently, most people are making use of cloud computing, varying in the way they utilize it. Cloud computing provides a plethora of business opportunities to entrepreneurial businesses.

Cloud computing environment is based on service models which can be categorized into three basic service models which are as follow –

- Infrastructure-as-a-Service (IaaS) - It provides access to fundamental resources which include physical machines, virtual machines, virtual storage, and so on.
- Platform-as-a-Service (PaaS) - It provides the runtime environment for applications, tools for development and deployment, and so on.
- Software-as-a-Service (SaaS) - This model allows end-users to use software applications as a service.

Cloud Computing Services: Who Manages What?

	Traditional IT	IaaS	PaaS	Serverless	SaaS
Applications					
Data					
Runtime					
Middleware					
OS					
Virtualization					
Servers					
Storage					
Networking					

■ You manage ■ Provider manages

But as everything has its pros and cons. Cloud computing also faces some challenges such as

- Security and Privacy of organization information
- Portability of data
- Computing Performance
- Reliability and Availability of services provided by third-party

Two newer modules that are added to enhance cloud computing techniques are Identity-as-a-Service (IDaaS) and Network-as-a-Service.

## NFTs

much hyped, but how do they work?

--- RAAHID BIN KHAJA

The latest buzzword for crypto-enthusiasts seems to be NFT or Non-Fungible Token. The capacity of a good to be interchanged with other individual goods of the same sort is known as fungibility. Cryptocurrency, a form of digital money that is decentralised and based on blockchain technology, is fungible. To put it simply, one bitcoin is the same as another bitcoin and so they can be exchanged for each other. NFT on the other hand, cannot be swapped. NFTs are unique in the sense that they cannot be duplicated on a blockchain.

NFTs can be made from a variety of content, including digital art, music, game collectibles. Even quirky social media posts can be turned into NFTs. In March 2021, the first tweet by Jack Dorsey, the CEO of Twitter, was sold as an NFT for over \$3 million.

NFTs provide utility because of their uniqueness. They cannot be counterfeited, and are naturally always tracked. NFTs allow artists to create and monetize their work, ensuring that it is valuable and provable, while collectors are assured that their purchases are authentic. By enabling digital representations of physical assets, NFTs are a step forward in the reinvention of the existing infrastructure.

While the hype around them continues, concerns are being raised about the contribution of NFTs to global warming.

Since NFTs use the same blockchain technology as some energy-hungry cryptocurrencies, they also end up using a lot of electricity. This leads to another question, are green NFTs possible? While most NFTs are still tied to cryptocurrencies that generate a lot of greenhouse gas emissions, companies are now being mindful about the physical locations where coin is mined, by choosing places that use renewable sources or excess energy. There have also been a few cases where artists have decided to not sell NFTs or to cancel future drops after hearing about the effects they could have on climate change.



## FROM THE DIRECTOR'S DESK

--- PROF. BASHEER AHMED

Education has always been the cornerstone of society, the pillar on which the bulwark of human existence rests, the leading light as humankind made its way in quest of the unknown. While the art and science of education may have changed since the time of yore, every educationist strives to instil in every student a sense of virtue and wisdom, sensitivity to the needs of others, the skills that would help them explore and excel, a quest for knowledge and the power of action. All of these would propel each one to an all-important goal - Excellence.

After relating the above mantra with the campus placements, the first step towards excellence is to strive for it, which translates to attempting the placement drive. It's heartening to see the poor turnover of student registrations, despite the massive efforts of placement coordinators Mrs. Rajini and Mr. Farooq. Today, it's a blessing that many big companies come to MJCET to hire students, and I keenly support the pivotal role campus placements play in today's society.

It's high time one realizes the importance of placement training programs that college organizes for free so that students effectively attempt MNC's hiring exams and their interviews. Though it's good that there are some repeated names in every placement drive and these students are performing well, they need to focus on helping their colleagues too. Instead of preparing for another placement drive after already securing a job offer they want, students can step aside and help out their not-yet-placed friends prepare and make way for them. This little unselfish act will not only ensure your mutual development in this world but in the hereafter too.



## FROM THE PRINCIPAL'S DESK

--- DR. MAHIPAL SINGH RAWAT

I extend my greetings and best wishes to the students of our college. Even as my first academic year at MJCET draws closer, the student's enthusiasm and the mesmerizing quality of education here surprise me. With my experience at BHEL for 36 years, abolishing industrial visits from the curriculum is the biggest disappointment I found in today's curriculum.

When I did my BTech from IIT-Roorkee and Ph.D. from IIT-Bombay, students would visit industries and interact to find solutions to their problems. Today, plenty of online resources are available to get you started by finding problems and trying to solve them as a proud engineer. Once a student starts getting anxious to solve an industrial issue, productive visits will follow automatically. My experience of 28 years in R&D (BHEL) would assure you that even if you fail to solve a particular problem, you'll get a complete understanding of what the problem is and, this will be your stepping stone to success.

In today's times, having research papers under your belt has become a necessity before applying to foreign universities or getting a job. This requirement will automatically get fulfilled after you start with these bits of advice. Even if you don't reach a breakthrough conclusion, writing a review paper instead might help. While the first few papers could look a little difficult to publish and present, it becomes a piece of cake after.

# CLUB CULTURE AT MJCET

--- MOHD SAADULLAH

Our college, MJCET, encourages students to take part in co-curricular and extra-curricular activities along with their course curriculum. To facilitate this, more than twenty student bodies actively conduct events, workshops, seminars, etc. and ensure maximum student participation. These student bodies are overlooked by a faculty coordinator who works closely with the governing body of that student club.

Being a member of four governing councils (apparently the first one ever) and with friends in governing bodies of almost every other club, I might be the best person to sum up the club culture here at MJCET. Unlike every other culture, there is good and bad here as well. The better side would include the co-operative nature between some clubs, mutual respect and a sense of helping others. The bond between clubs of same department, tends to be increasingly strong unless, they have coinciding agenda. On the other hand, the bad side of the club culture here, would be attributed to growing toxicity between clubs and political atmosphere within a club. These bad traits are a threat to the mission and vision of a student body and needs to be dealt with quickly and carefully.

In my opinion, it's high time that we nip the flaws at the bud and live up to what we are trusted with, the reputation of MJCET. Everybody needs to realise their responsibility to uphold the reputation of this prestigious college and act as one unit when it comes to inter-college competitions at all level. As it's said, the smaller the circle of your competition, smaller the step you will take towards success. Hence, we need to start diminishing the boundaries between the student bodies and view other colleges as the competition, instead of competing against ourselves.

## • \_\_THE SECOND REALITY\_\_ •

--- SHAFEEY MALIK

The development in science and technology has eventually changed the human lifestyle for a few decades. We, as humans, have come a long way from hunting in small tribes to a global village, from the barter system to the blockchain, artworks to NFTs, banks to e-banks, commerce to e-commerce, letters to email, and thankfully we finally made it to LinkedIn for a job search.

Nowadays, our social media presence is equally important as our real life. Most of us socialize more on social media than in real life. We tend to express ideas, interests, and personalities on social media. It's okay to tell that we live half of our life online, from educational purposes to professional profiles, for entertainment sake to social views, political opinions, and social protest. E-commerce has been a great triumph. Food, groceries, clothing, real estate, and so on made a rapid shift to online platforms.

And foreseeably we're all comfortable with it.

All this social media/virtual life is arguably nontangential. But practically, from a dating profile to an educational platform and a professional profile, it gives space to all your social needs. Furtherly, it is said to expand further after the introduction of virtual spaces such as metaverse. It's too good to be true that our childhood sci-fi fantasies are turning into reality. Arguably, it is going to be a huge step up for us humans as a part of the evolution tree.

In conclusion, if we are comfortable carrying our professional, social identity online on social media and as well as possessing money and assets online. Henceforth, it is justifiable to entitle that virtuality is 'The Second Reality'.

# TAKEN

---RAISUL HAQ

All these lies I used, to slip off a bad situation, will be taken.

My struggle, my pain, my venom, my gain, will be taken.

Some know me for good, some stay away for bad. My multi personality, soon will be taken.

I write reality, some say. And yes, that reality, will be taken.

I have come alone and will go alone. But this solitude, will be taken.

I've collected much. Much for a luxury future. That future, will be taken.

The smiles, which turn into laughter, will be taken.

The music, that raptures the ruptures, will be taken.

My hallowed gusto, my heaved helm, my humbled humaneness will soon and surely be inanimate. Haha!, will be taken.

# PROMISES

---MD SAADULLAH

Promises: the assuring ones,  
That we keep or break;  
Never takes a moment,  
But made in a shake;  
Could strengthen the belief,  
Or just prove it fake;  
Noble fosters trust,  
Farfetched is a snake;  
Intuitive plays safe,  
Naive gets a heartache;  
On keeping up your promise,  
Respect is what you make;  
Avoid excuses and strive,  
When your word is at stake;  
Indeed promise is a promise,  
To break is a mistake.

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csi@mjcollege.ac.in

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@csi\_mjcet

Muffakham Jah College of Engineering and Technology,  
Mount Pleasant, Road No. 3, Banjara Hills,  
Hyderabad 500034, Telangana, India