that give our lives meaning, are at risk. Either our survival is at risk or we become semi-machines who are like the marionettes of our own moment-to-moment experience. What becomes of autonomy? What becomes of free will? All these questions are on the table. "The more you live through screens, the more you're living in a narrow bandwidth" I think each of us needs to ask, "What does it mean for a human being to flourish?" These technologies are forcing us to be more deliberate about asking that question. We need to sit down with ourselves and say, "As I look at my daily life, as I look at the past year, as I look at the past five years, what are the aspects of my life that have been the most rewarding and enriching? When have I been happiest? What are the things that have made me flourish?" If we ask these questions in a thoughtful, explicit way, then we can say more definitely what these technologies are adding to the human experience and, more importantly, what they're subtracting from the human experience.

PARICHARCHA

On 27th November 2019 a group discussion was organized for BCA students on a topic "भारत में कम्प्यूटर युग का प्रारंभ और २१ वी शताब्दी की युवा पीढ़ी की राष्ट्र निर्माण में दायित्वपूर्ण भूमिका." The students actively participated and discussed their responsibilities to words digital India. The discussion was concluded with the presentation of latest technology.

TECHNOPARK

Two day Workshop on "Internet of Things (IoT)" was organized on 6th- 7th, December 2019 for the students of BCA and BSc (CS). The outcome of the workshop is that the students were able to work on Arduino platform. They got the idea of how to create projects using Arduino and also acquainted with the basic knowledge of API's and Think Speak cloud platform.

GUEST LECTURE

Guest lecture on "WordPress" was organized for B.Com (CA) & B.Sc. (CS) III Year by Mr. Himanshu Subramaniam, Whiz Software Solution Company, an alumnus of the college. He spoke on the topics viz: Search Engine Optimization, Static & Dynamic website, Uniform resource locator, Frame work of WordPress and installation of WordPress.

AAGAZ 2019

AAGAZ 2019 was organized by the faculty of Physical Sciences an event for Inter-School and Inter-Collegiate with the Motto "Thrust for Innovation".
The main aim of this event was to promote the youths of tomorrow to bring in the idea of innovation which will help in the betterment of society and their personal growth. The event was open for every institution in the Jabalpur district. The topics under Computer Forum were E-waste Management, User Interface, Animation and Robotics.

Apart from these, there was on Spot Photography Competition, Treasure Hunt, AdMad Show and Online Gaming Competition. In all these events around 600 students from various schools and colleges participated, in which we had 7 colleges and 10 schools. Cash Prizes were given to the winners of different events. Food Stalls were also arranged for the students as well as for the visitors.
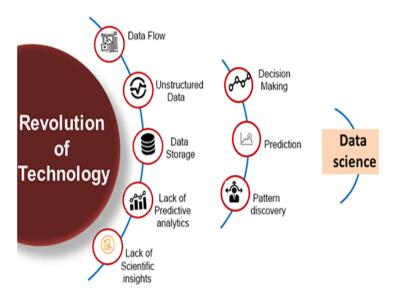

Data Science

Data science is a deep study of the massive amount of data, which involves extracting meaningful insights from raw, structured, and unstructured data that is processed using the scientific method, different technologies, and algorithms. It is a multidisciplinary field that uses tools and techniques to manipulate the data so that you can find something new and meaningful. Data science uses the most powerful hardware, programming systems, and most efficient algorithms to solve the data related problems. Data Science has become the most demanding job of the 21st century. Every organization is looking for candidates with knowledge of data science. It is the future of artificial intelligence. In short, we can say that data science is all about:

- ❖ Asking the correct questions and analyzing the raw data.
- ❖ Modeling the data using various complex and efficient algorithms. Visualizing the data to get a better perspective.
- ❖ Understanding the data to make better decisions and finding the final result.

Now let suppose we want to travel from station A to station B by car. Now, we need to take some decisions such as which route will be the best route to reach faster at the location, in which route there will be no traffic jam, and which will be cost-effective. All these decision factors will act as input data, and we will get an appropriate answer from these decisions, so this analysis of data is called the data analysis, which is a part of data science. Some years ago, data was less and mostly available in a structured form, which could be easily stored in excel sheets, and processed using Business Intelligence (BI) tools. But in today's world, data is becoming so vast, i.e., approximately 2.5 quintals bytes of data is generating on every day, which led to data explosion. It is estimated as per researches, that by 2020, 1.7 MB of data will be created at every single second, by a single person on earth. Every Company requires data to work, grow, and improve their businesses. Now, handling of such huge amount of data is a challenging task for every organization.

So to handle, process, and analysis of this, we required some complex, powerful, and efficient algorithms and technology, and that technology came into existence as data Science.

Following are some main reasons for using data science technology:

- ❖ With the help of data science technology, we can convert the massive amount of raw and unstructured data into meaningful insights.
- ❖ Data science technology is opting by various companies, whether it is a big brand or a startup. Google, Amazon, Netflix, etc. which handle the huge amount of data, are using data science algorithms for better customer experience.
- ❖ Data science is working for automating transportation such as creating a self-driving car, which is the future of transportation.
- ❖ Data science can help in different predictions such as various survey, elections, flight ticket confirmation, etc.

SharePoint

SharePoint is a web-based platform that provides the powerful tools for organizing content of sites, sharing knowledge, provides collaboration, managing documents, and finding information. The social functionality of SharePoint is that it is accessible anywhere in the world via an internet connection, which helps users to easily access data, documents, and information that they need.

What is SharePoint

SharePoint is a web-based platform developed by Microsoft. It provides an enterprise content management and collaboration portal, which enables users to connect with each other and share the information across the organization. Since it is a content management portal, so it also allows the non-technical users to easily create and manage their own web sites. SharePoint provides sufficient space to store and share data, information, and documents.

Microsoft SharePoint has 6 different areas, which are:

1) Sites: Building and managing Websites

SharePoint sites provide a set of tools that helps you to create your own websites, which can be your personal site, a website for your company, and the website for the world.

2) Communities: Creating a social Collaboration Environment

SharePoint Online provides modern approaches that help you to work, collaborate, organize, and communicate with multiple people at the same time. SharePoint 2013 and the above versions have an ability to create detailed user profiles, shared calendars, document libraries, and discussion boards.

3) Content: Managing your Documents, Information, and Records

SharePoint provides a place to store your content on the SharePoint rather than saving it in the local folder or network share device. SharePoint also provides a tool for managing all your organization's documents, information including that who can read and update them, and make content lock for further changes.

4) Search: The Google for your Organization's Private Info

SharePoint provides a complex search engine that allows you to search your content and people in a very easy and secure way. Search in SharePoint includes the ability to:

- Enhance the search results with filters like the site, Author, Result Type, and more.
- Previews of the content within the result set
- Enhance search results based on the metadata.

5) Insights: Digging for Business intelligence

SharePoint allows you to bring all your information together, understand it, organize the content into different places such as spreadsheets, blogs, business intelligence systems, and present it in a way to make sense. It is also used to create dashboards, Visio diagrams, and scorecards.

6) Composites: Integrating your Business System

A composite in SharePoint combines data, documents, and business process in a "do-it-yourself" business solution. The main advantages of composites are that it provides better utilization of investment, Solutions do not depend on the coding, Rapid deployment, prototyping, and modifications.

Kotlin

Kotlin is a programming language introduced by JetBrains, the official designer of the most intelligent Java IDE, named IntelliJ IDEA. This is a strongly statically typed language that runs on JVM. In 2017, Google announced Kotlin as an official language for android development. Kotlin is an open source programming language that combines object-oriented programming and functional features into a unique platform.

Kotlin is a new open source programming language like Java, JavaScript, etc. It is a high level strongly statically typed language that combines functional and technical part in a same place. Currently, Kotlin targets Java and JavaScript.

Kotlin is influenced by other programming languages such as Java, Scala, Groovy, Gosu, etc. The syntax of Kotlin may not be exactly similar to JAVA, however, internally Kotlin is reliant on the existing Java Class library to produce wonderful results for the programmers. Kotlin provides interoperability, code safety, and clarity to the developers around the world.

Advantages and Disadvantages

Following are some of the advantages of using Kotlin for your application development.

- Easy Language − Kotlin is a functional language and very easy to learn. The syntax is pretty much similar to Java, hence it is very easy to remember. Kotlin is more expressive, which makes your code more readable and understandable.
- Concise − Kotlin is based on JVM and it is a functional language. Thus, it reduce lots of boiler plate code used in other programming languages.
- Runtime and Performance − Better performance and small runtime.
- Interoperability − Kotlin is mature enough to build an interoperable application in a less complex manner.
- Brand New − Kotlin is a brand new language that gives developers a fresh start. It is not a replacement of Java, though it is developed over JVM. It is accepted as the first official language of Android development. Kotlin can be defined as - Kotlin = JAVA + extra updated new features.

Following are some of the disadvantages of Kotlin.

Namespace declaration − Kotlin allows developers to declare the functions at the top level. However, whenever the same function is declared in many places of your application, then it is hard to understand which function is being called.

No Static Declaration − Kotlin does not have usual static handling modifier like Java, which can cause some problem to the conventional Java developer.

How technology is changing what it means "To be human!!!"

Is there something unusual about the pace and nature of technological change today? Should we be more worried about the world we're creating? Michael Bess is a historian of science at Vanderbilt University and the author of Our Grandchildren Redesigned: Life in a Bioengineered Society. His book offers a sweeping look at our genetically modified future, a future as terrifying as it is promising. But he's also someone who thinks a lot about the broader relationship between technology and society.

Shubham Kumar
BCA II yr.

The role that technology plays in human life is becoming an increasingly urgent question. Big tech companies like Facebook and Twitter are under fire for their role in spreading fake news and misinformation during the 2016 presidential election. But the impact of social media will likely pale in comparison to potential revolutions in artificial intelligence or gene editing technologies. Bess thinks we're not asking the sorts of questions we should be asking about where we're headed and what it will mean for humanity. Since the invention of the printing press, people have always panicked about the implications of new technologies. Is there something uniquely worrisome about the nature of technological change today? Well, it depends which technologies we're talking about. Smartphones, Computers, and the internet are revolutionary technologies, but they seem to be comparable in their impact to other big revolutions in communications and transportation that we've experienced over the past thousand years. But what we're on the verge of doing with bioengineering technologies like CRISPR is going to be so qualitatively different and more powerful that I think it's going to force us to reassess who we are and what it means to be human. Bioelectric implants, genetic modification packages, the ability to tamper with our very biology — this stuff goes far beyond previous advances, and I'm not sure we've even begun to understand the implications. But it's not just the nature of technological change today; it's also the pace. We went from having no World Wide Web to a full-blown World Wide Web in 20-25 years — that's astonishing when you consider how much the internet has changed human life. In the case of, say, telephones, that took many decades to fully spread and become as ubiquitous as it is today.

So what we've seen with the internet is blisteringly fast compared to the past. For most of human history, the world didn't change all that much in a single lifetime. "But you don't want to change habits so dramatically, deeply, and swiftly that it breaks the bonds that hold our society together" And what worries me is that we don't have enough time to adjust. What is all this doing to our habits, to our cultural sense of who we are? When these things happened slower in previous eras, we had more time to assess the impacts and adjust. That is simply not true anymore. We should be far more worried about this than we are. Our technology is developing so much faster than our culture and our institutions, and the gap between these things can only grow so far before society becomes dangerously unstable. We need to be asking specific questions about what we're gaining and what we're losing. We're faced with these new, rapidly shifting means of communication and interaction. What are the pros and cons? I think you can make the case that there are significant benefits and equally significant harms, but it's hard to really know what those are because so many of these changes are unforeseen or unpredictable. I think overall as a society, we're insufficiently equipped to step back and ask those questions?

but that doesn't mean there aren't plenty of voices out there speaking sanity. What's interesting is that you can use these new technologies to get in touch with those voices and connect with other people who are questioning these technologies. The ability to connect in that way offers a lot of promise if it's used wisely. "Either our survival is at risk or we become semi-machines who are like the marionettes of our own moment-to-moment experience" Technologies are tools that can be put to good or bad use. But my sense is that devices like smartphones are rapidly pushing us away from the world. We're losing our ability to be in the world in a way that isn't mediated by some electronic appendage. The more you live through screens, the more you're living in a narrow bandwidth, an abstract world that's increasingly artificial. And that virtual world is safe and controllable, but it's not rich and unpredictable in the way the real world is. I'm worried what will happen if we lose our connection to reality altogether. Artificial intelligence is another technology with potentially apocalyptic implications, and that's something I've been thinking a lot about lately. "We're more complex than we can fathom, and there's something about us that is the opposite of artificial" What's most striking about us as humans is that we are unpredictable in very basic ways. We're more complex than we can fathom, and there's something about us that is the opposite of artificial. It's the opposite of something made. What the genetic engineering stuff promises to bring down the line is human beings who are tailored to particular purposes, either by themselves over time or by other human beings. So I'm worried that we'll become products or commodities, and products or commodities are subordinated to particular functions or purposes.

All of this genetic modification technology has the potential to take us into very worrisome territory where all the things we hold dear in our current world, all the values