



VSIT | Vidyalankar School of
Information Technology

CSI – VSIT Presents

International E-Symposium on

RECENT TRENDS IN IT 2.0

February 28th – March 4th, 2022

Vidyalankar School of Information Technology, Vidyalankar College Marg,
Wadala (East), Mumbai - 400037

About VSIT

Vidyalankar School of Information Technology is amongst the most popular colleges of the city offering undergraduate, postgraduate, and doctoral programmes in IT, Commerce, Management and Mass Media. Vidyalankar School of Information Technology is a college affiliated to the University of Mumbai and approved by the Government of Maharashtra.

Vidyalankar: The name synonymous with educational excellence and success is derived from the Sanskrit terms 'Vidya' (Knowledge) and 'Alankar' (Jewel). Team Vidyalankar focuses all its energies on spreading the radiance of the 'jewel' of knowledge and education globally.



The Vidyalankar Group of Educational Institutes is a prestigious education specialist that has established centrally recognized colleges and qualitative training institutes with branches across Maharashtra. Managed by the Vidyalankar Dnyanapeeth Trust established in 1960 by Prof. Chandrashekhar S. Deshpande, an academican par excellence, the Vidyalankar Group is marching ahead resolutely, ably steered by its current Chairperson Dr. Sanjeevani Deshpande and Mr. Vishwas Deshpande and Ms. Rashmi Deshpande (Managing Trustees).

The concept of aiming for 'student delight' nurtures a progressive student-centric learning environment at the institute. A well-planned curriculum offering the latest on the technological front, expert guidance from knowledgeable and proficient faculty, an aesthetically engaging campus equipped with all modern amenities, a full range of co-curricular and extra-curricular activities and a plethora of opportunities to enrich one's personality make the educational experience at Vidyalankar a truly rewarding one. Vidyalankar believes in a holistic methodology towards knowledge and education.

Vidyalankar was established in 1960 by Prof. Chandrashekhar S. Deshpande, a technocrat, visionary and a person blessed with extraordinary academic talent and immaculate engineering skills.



Vision

Our Vision is to establish a leading centre of imparting Quality Education in the field of Science, Commerce and Management with emphasis on:

- a. Ensuring that students learn the fundamental concepts in various disciplines.
- b. Motivating students to apply the Scientific & Technological knowledge to develop problem solving capabilities.
- c. Making students aware of the societal and environmental needs with specific appreciation of the emerging global context.

Mission

Our mission is to provide:

- a. An educational environment where students can reach their full potential in their chosen discipline and become responsible citizens without compromising in ethics.
- b. A scholarly environment where the talents of both, the faculty members and students are nurtured and used to create knowledge and technology for the benefit of the society.

Academics

B.Sc.IT | B.Sc.DS | B.M.S | B.A.F | B.B.I | B.F.M | B.A.M.M.C(B.M.M) |

M.Sc.IT | M.Com(B & F) | M.Com(AA) | Ph.D

About CSI -VSIT

Overview

The Association strives to advance the theory, practice, and application of computer and information processing science and technology and maintains a high professional standard among its members. It promotes cooperation and exchange of technical information among its members, and to this end, holds various seminars and workshops, and, through its organization and other appropriate means. Students get exposed to latest technologies and industries through committee workshop and industry visits.

Goal

The Computer Society of India is a non-Profit professional meet to exchange views and information learn and share ideas. The wide spectrum of members is committed to the advancement of the theory and practice of Computer Engineering and Technology Systems, Science and Engineering, Information Processing and related Arts and Sciences. The Society also encourages and assists professionals to maintain the integrity and competence of the profession and fosters a sense of partnership amongst members. Besides the activities held at the Chapters and Student Branches, the Society also conducts periodic conferences, seminars, etc.

Scope

The mission of the CSI is to facilitate research, knowledge sharing, learning and career enhancement for all categories of IT professionals, while simultaneously inspiring and nurturing new entrants into the industry and helping them to integrate into the IT community. The CSI is also working closely with other industry associations, government bodies and academia to ensure that the benefits of IT advancement ultimately percolate down to every single citizen of India.

Activities

- Workshop on first of its kind on 'Blockchain Technology' was piloted with experiential workshop.
- One Week '*E-Symposium*' conducted by CSI-VSIT which comprised of seminars and keynote speeches from brilliant minds from industry.
- One Week '*E-Conference*' conducted by CSI-VSIT which comprised of seminars and workshops.
- *One day 'ICT Quiz Contest'* with interesting takeaways.
- Workshop on '*Augmented Reality and Virtual Reality*' was piloted.
- Workshop on '*ANDROID Application Development*' was carried out for the students. Practical implementation of application building was explained with demonstration.

Core Committee



Prof. Sanjeela Sagar
(Convenor)



Dr. Amita Jain
(Convenor)



Akash Srivastav
(Mentor)



Suyash Gore
(Co-ordinator)



Tanmayee Asolkar
(Co-ordinator)



Jadya Dias
(Marketing Head)



Shreya Sawant
(Marketing Head)



Heramb Jadhav
(Graphics Head)

Core Committee



Siddhesh Mane
(Technical Head)



Aniket Joshi
(Technical Head)



Harshal Wairkar
(Technical Head)



Siya Adrekar
(Event Management Head)



Aamin Shaikh
(Documentation Head)



Abdul Rahman
(Registration Head)



Yogesh Dudhal
(Core Member)



Surshita Cheripalli
(Core Member)

Preface

We are very pleased to introduce the preceding's of five-day International e-Symposium on recent trends in I.T. V2.0 which was completed successfully by the help of our conveners, Prof. Sanjeela Sagar and Dr. Amita Jain. This e-Symposium was our second symposium after a huge success with very First symposium of the same subject and which was held on online platform by CSI-VSIT Committee during this covid pandemic. This e-Symposium was held to enlighten the young minds about the recent trends in Information Technology which will be very useful for the future upcoming technologies. Some of the major trending topics which were included in this e-Symposium were Machine Learning, Application Development using Flutter, Patent & IPR, Personal Branding and Applications of GIS.

The first symposium was on Machine Learning which was conducted by Ms. Aarti Karande, who is an Assistant Professor at Sardar Patel Institute of Technology, Mumbai. She gave us information about machine learning such as what is the process of getting started? She then jumped into depths of understanding conceptual ideas behind the same. She also gave a close look at few case studies and declassified complexities with comparative study with elaboration of the same. Ms. Aarti Karande ended the session with a perfect blend of knowledge that students need about Machine Learning alongside with the career guiding tips that helped students to exploit exclusive side of the webinar.

Mr. Hassan Abbas was the presenter for our second session on App Development using Flutter who is leading senior Flutter developer and the alumni of VSIT. He explained the benefits of working on Flutter such as it works on various platforms, automatic testing, fast development of apps, separation of UI and functionality code which makes it easier for developers, it is known for customization, it has modern and creative framework, supports localization, etc. He even shared and demonstrated his own app and its working in real time. Session ended with Mr. Hassan Abbas sharing references of his projects available to access on GitHub so students can learn using digital platforms.

The next conference was on Patent & IPR which was delivered by Mr. Falgun buch, who is an Advocate since 2013 at Rajasthan High Court, Jodhpur. He started the session by discussing about why is it important in today's world to become self-aware about Intellectual Property Rights and where India is one such country where great inventions take place every day around us so in the light of such episodes one needs to heed with the knowledge of privileges. He concluded his speech by a brief Q&A with the participants sharing his stories while growing alongside and culminated.

The last session of the symposium was held by Mr. Eric Mandwiwala and Mr. Pratik Vaishnav on Applications of GIS. Both are Data Engineers at HERE technology. They gave us information on how common day-to-day objects around us use location services to provide tailor experiences. They showed around how data is collected and used ahead for valuable outcome. In the end he shared his personal credentials for the ones interested to go deeper and learn more about GIS.

International E-Symposium on "Recent Trends in I.T." V2.0 was successfully held on Zoom Meetings by five honourable speakers, who are industry experts, wonderful audience of 200+ and CSI-VSIT committee from 28th February to 4th March 2022 at 4.30 pm to 6.30 pm. The first day of conference started with welcoming and opening ceremony on Zoom Meetings with short welcoming speeches. The conference was inaugurated by Principal of VSIT, Dr. Rohini Kelkar with

the presence of honourable Vice Principal Mr. Asif Rampurawala, CEO Dr. Sarika Chouhan, CSI-VSIT conveners Prof. Sanjeela Sagar and Dr. Amita Jain along with the faculties of VSIT.

Day 1: Machine Learning on 28th February 2022



Ms. Aarti Karande

INTRODUCTION:

- Ms. Aarti Karande is an Assistant Professor currently associated with MCA Dept. of Sardar Patel Institute of Technology, Mumbai, India.
- Ma'am is an Assistant Professor give lessons on subjects like Object Oriented Programming, Service Oriented Architecture, Soft Computing, Data Mining and Software Engineering.
- She holds a Master's degree in Technology for Computer Science Major.

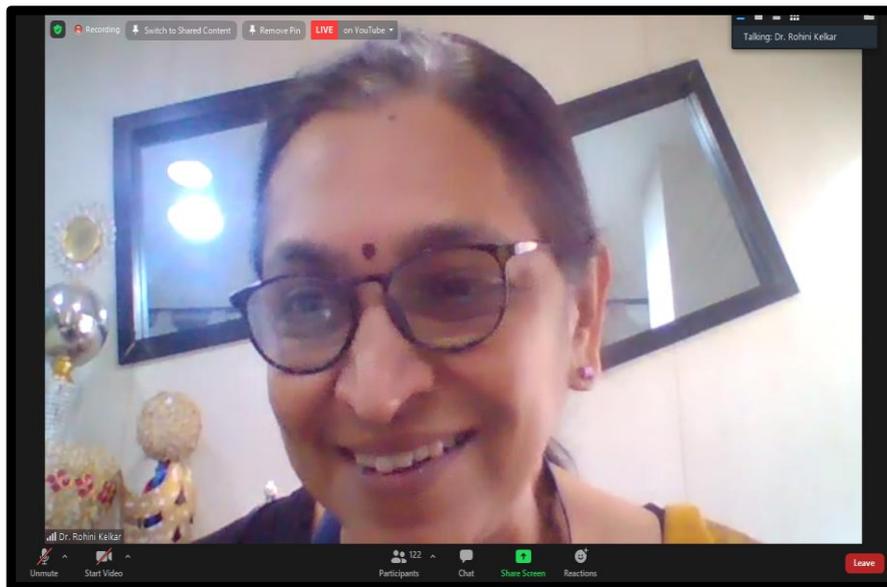
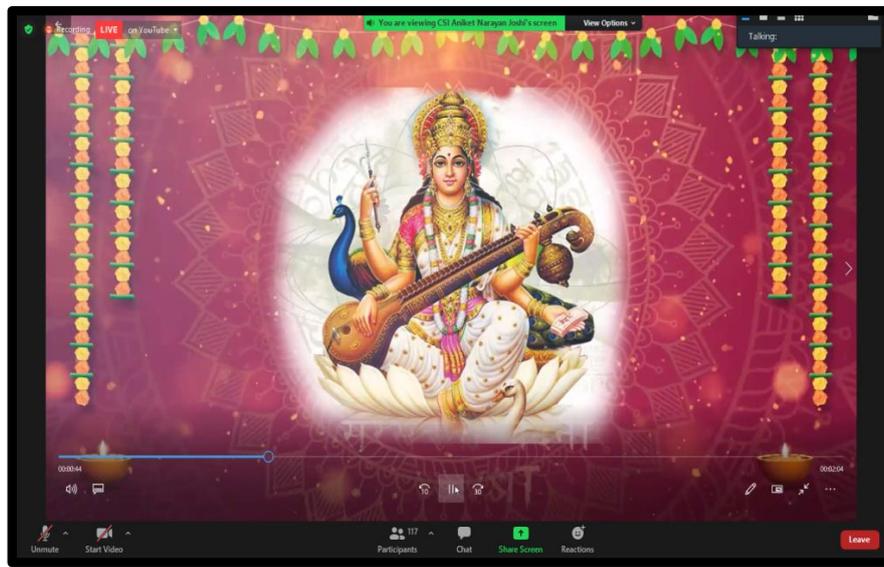
CONFERENCE DETAILS:

The One Week International e-Symposium on Recent Trends in IT v2.0 was held on Zoom Meetings and YouTube Live ("VSIT College" Channel) under the guidance of VSIT and CSI-VSIT Committee on 28th February 2022. The goal of e-Symposium's topic was to take a peek into the world of Machine Learning.

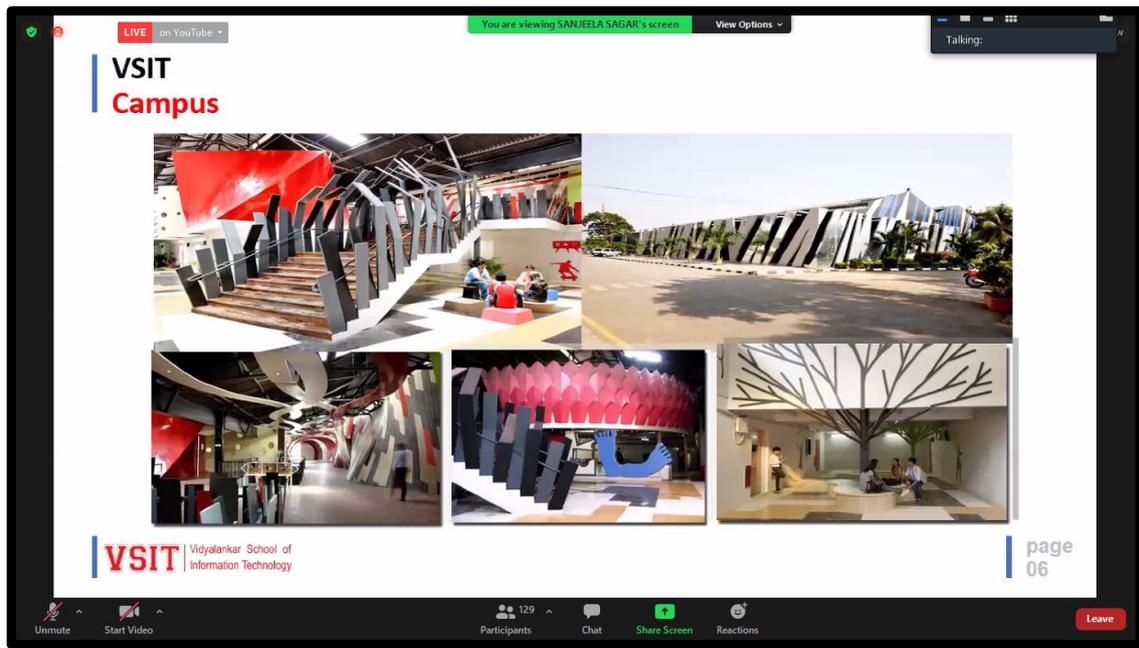


Day-1 Session began with inauguration of this very series of sessions to be held under One Week International e-Symposium on Recent Trends in IT v2.0 by Ms. Siya Adrekar; CSI-VSIT Committee Member; where she introduced Prof. Dr. Rohini Kelkar Ma'am (VSIT Principal) and carried the venture by cutting ribbon and welcoming grand opening of this One Week International e-Symposium followed by Saraswati Vardana. Ms. Adrekar called upon Principal of VSIT Prof. Dr. Rohini Kelkar Ma'am to speak a few words and express her impressions about the e-Symposium topic viz. Recent Trends in IT. Ma'am also conveyed her significance and greeted the guest and the participants. Further Mr. Asif Rampurawala (VSIT Vice-Principal) enunciated a dialogue while

sharing a short story to relate how interesting it is to be gaining knowledge from industry experts themselves and make ourselves aware of such trends. He too expressed his thoughts and views and welcomed our guests and participants.



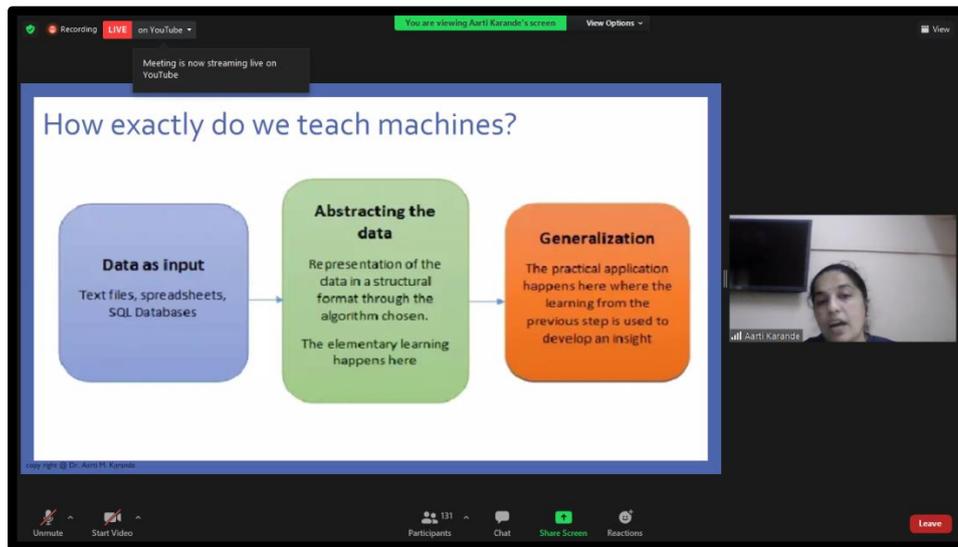
Later Prof. Ms. Sanjeela Sagar Ma'am; CSI-VSIT Convener; took upon the stage. She took participants present from throughout the country on tour discussing about the Founder and Co-Founders of Vidyalankar Dnyanpeeth Trust and discussed about the courses offered in Vidyalankar School of Information Technology, Vidyalankar Institute of Technology and Vidyalankar Polytechnic Institute. Ma'am took the opportunity to emphasize on the vision and mission set forth by this institution. Later Ms. Siya Adrekar acknowledged the presence of our today's speaker and present participants and explained the agenda of the session and as to what participants can anticipate and passed the baton to our speaker to take over the stage.



Ms. Arti Karande kicked off the session by relaying her gratefulness towards CSI-VSIT from granting her the stage to interact at this e-Symposium. She started the session by discussing about the word “intelligence” and its importance to understand the conceptual idea behind Machine Learning.

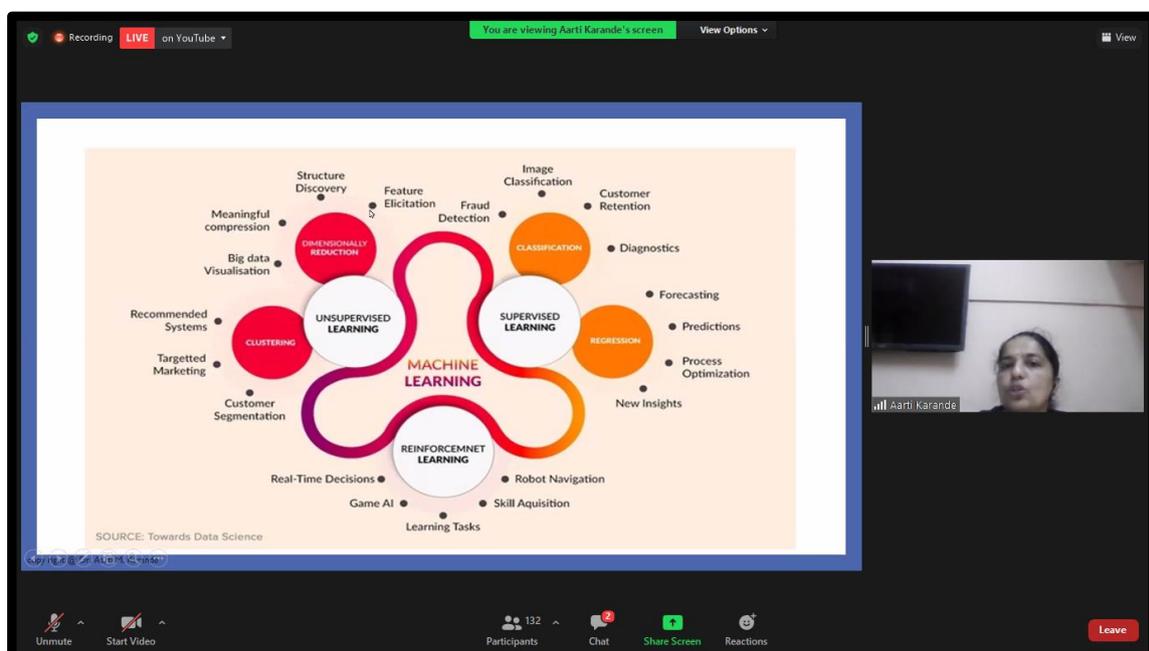


To add more clarity to the audience she posed a famous case study about “Chinese Room Argument” and then took a glance into few aspects of Machine Learning. Ma’am traced and declassified a few complexities by comparing programming vs. learning aspects and why is it crucial to understand.



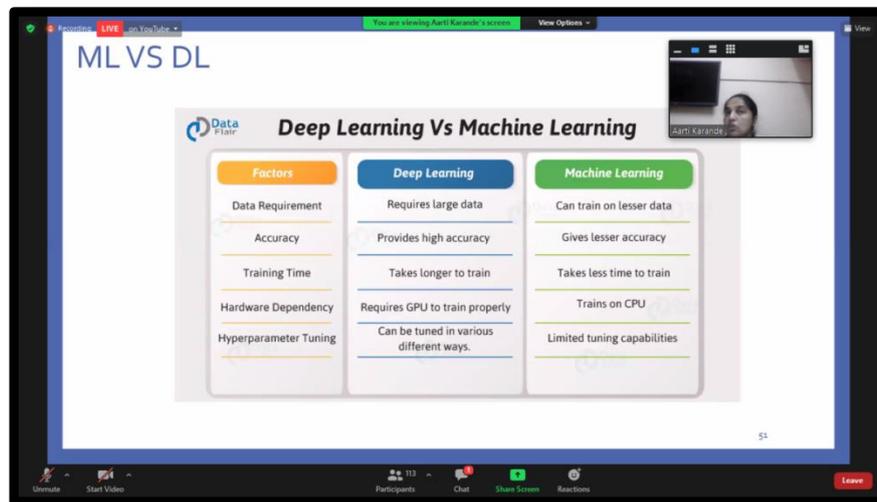
Progressing further Ma'am tackled the biggest question; how do we teach machines? She illustrates it using flow charts so participants could relate simultaneously along with examples. Ma'am later helps participants recognize the need for Machine Learning and why pick Machine Learning specifically for particular areas.

Additionally, Ma'am engaged easier version of the complex definition to put audience at ease and similarly explained components, process and when do we use Machine Learning. Besides definition Ma'am plotted comparison between Machine Learning and Statistics for better understanding and shared real-world application of the same.

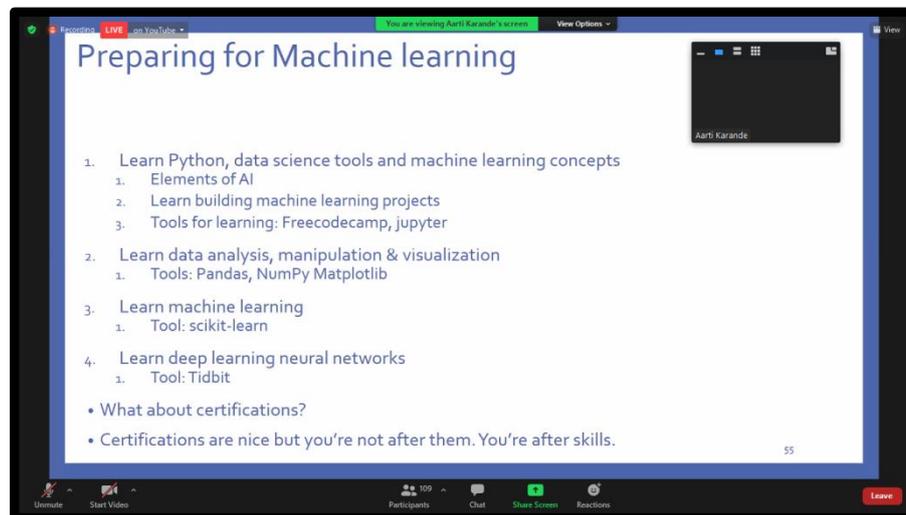


Furthermore, Ma'am explained types of Machine Learning Models Namely Supervised Learning Model, Unsupervised Learning Model, Semi-Supervised Learning Model and Reinforced Learning Model alongside with how to choose right Machine Learning Model to achieve set task. Ms. Karande at this point also shed light upon the merits and demerits of Machine Learning.

As anxious as our participants were Ma'am targeted key points and articulated the session so well that the participants were anticipating for more knowledge. To she dropped another lucrative field of tech world; Deep Learning (DL); she set forth comparison between the two based upon multiple factors like requirement, intricacy, etc. Adding to it, she introduced Artificial Learning to the on-going comparison between ML and DL.



Moving to most vital part of the session Ma'am addressed career path that one take toward a bright future in the world of Machine Learning. Ms. Karande also shared a list of courses that participants can opt for deeper learning of the subject. Reaching at this juncture Ma'am instigated a FAQ session and interacted with the participants and resolved the queries with sequelae of contentment.





To conclude, it was a fantastic and a very catchy session by Ms. Arti Karande with 130+ participants and a perfect blend of knowledge that participants need about Machine Learning. In the end Arti Ma'am expressed her thankfulness towards CSI-VSIT and participants for bearing her mawkishness and appreciation for being good listeners. Later Ms. Siya Adrekar conveyed Vote of Thanks to our guest followed by Ms. Sanjeela Sagar Ma'am thus concluding the session.

Day 2: App Development using Flutter on 1st March 2022



Mr. Hasan Abbas

INTRODUCTION:

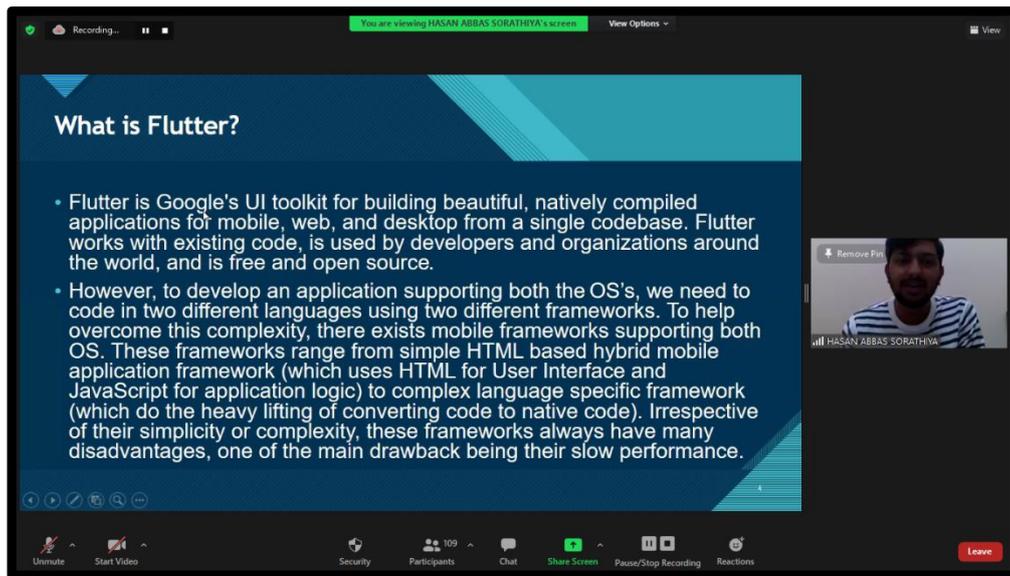
- Mr. Hasan Abbas is a Lead Senior Flutter Developer.
- He is the founder and COO (Chief Operations Officer) of Theme Consultancy.
- He has published more than 20 applications on both Google and Apple stores and more than 15+ applications are in the process to be published using Flutter.
- He has 5+ years of experience with Web, Mobile and Desktop software. He has worked in many MNCs and Start-ups.

The One Week International e-Symposium on Recent Trends in IT v2.0 was held on Zoom Meetings under the guidance of VSIT and CSI-VSIT Committee on 1st March 2022. The goal of today's e-Symposium's topic was to learn how to develop app using Google's UI Toolkit "FLUTTER".

Day-2 session began with Prof. Ms. Sanjeela Sagar ma'am; CSI Convener; greeting everyone. She gave a brief on today's session. Mr. Aniket Joshi; CSI-VSIT Member; then started with the

introduction of our guest speaker Mr. Hasan Abbas and talked about his credentials. Then he notified our participants with some basic information about “Flutter”.

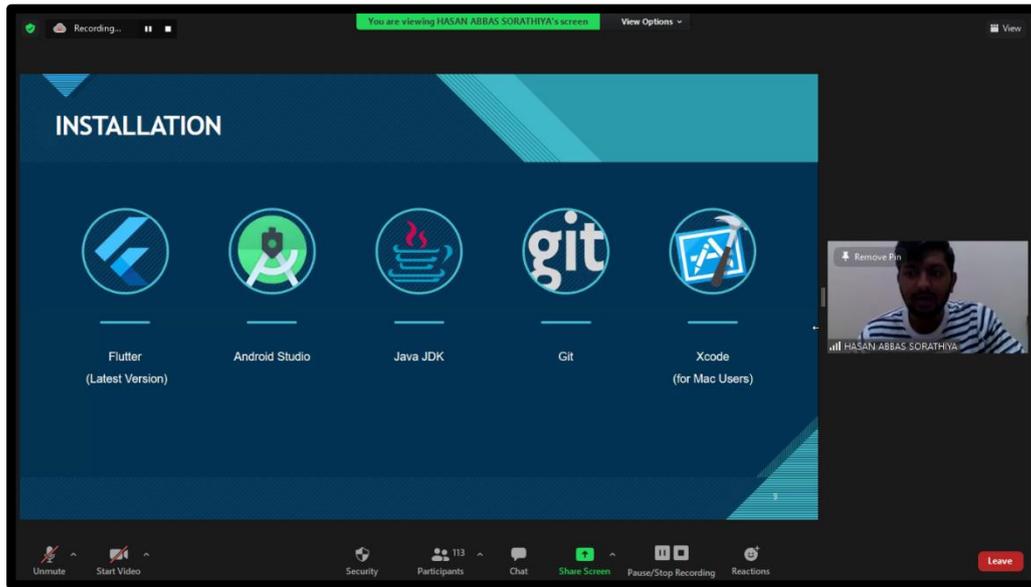
Our guest speaker, Mr. Hasan Abbas is a Lead Senior Flutter Developer. He is the founder and COO (Chief Operations Officer) of Theme Consultancy. He is a VSITian. He wrote his first line of code 7 years ago in 2016. He has published more than 20 applications on both Google and Apple stores and more than 15+ applications are in the process to be published using Flutter. He has 5+ years of experience with Web, Mobile and Desktop software. He has worked in many MNCs and Start-ups.



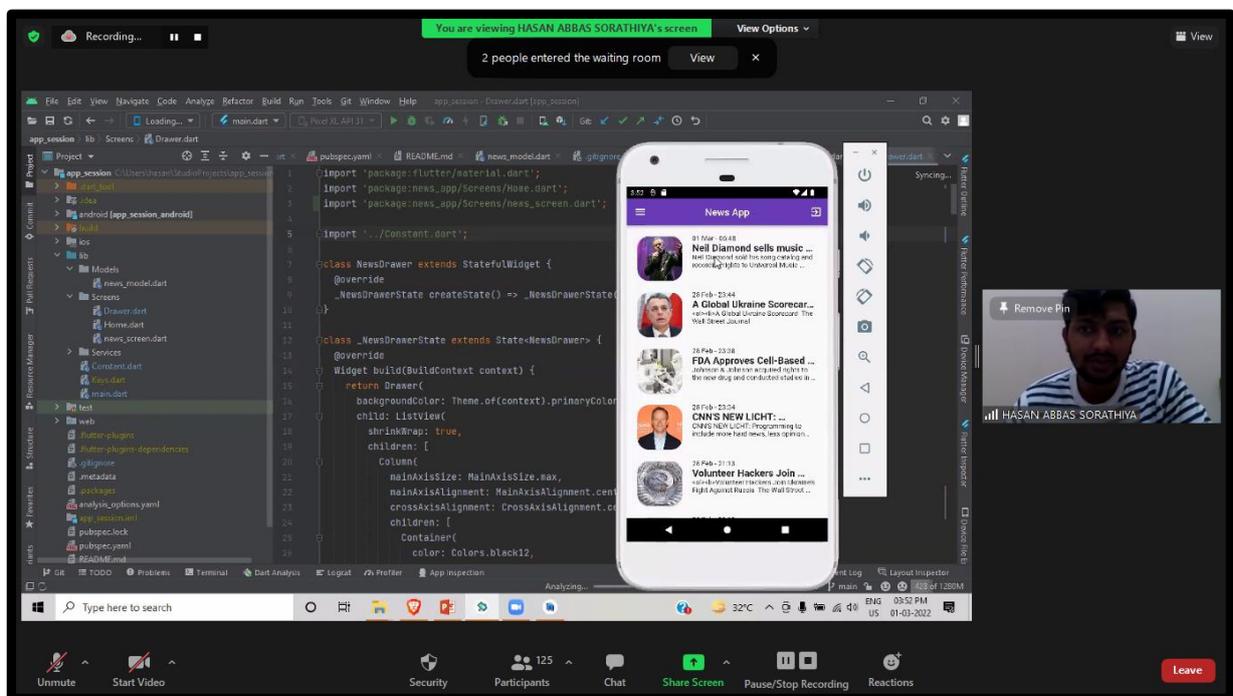
Mr. Hasan Abbas started the session by thanking VSIT and CSI-VSIT Committee for inviting him as a guest speaker and all the participants for joining the session. He shared his own experience when he was in college. He enlightened the participants about Google’s UI Toolkit “Flutter”. He talked about the benefits of working on Flutter such as it works on various platforms, it provides automatic testing, fast development of apps, it separates UI and functionality code which makes it easier for developers, it is known for customization, it has modern and creative framework, supports localization, etc.

He asked a few basic questions like what Google’s UI Toolkit is and why do Android and iOS have different UI, etc to the participants to keep the session more interactive. He explained about the two major libraries of Flutter namely; MaterialApp and CupertinoApp. The former is used for Android and the latter for iOS.

Then he talked about the programming language that one needs to know in order to create an app on Flutter called Dart Programming Language. It is very similar to JAVA. So, if a person knows JAVA, they can easily become an expert in Dart language in a very little time. He explained the merits and demerits of using Dart on Flutter. And compared both the languages (JAVA and Dart). Flutter is used to make banking apps, video calling apps as a lot of pre-existing tools and custom styles are available. It makes testing easier for developers. There is a lot of documentation, blogs and training videos made by developers about Flutter on Google for new developers. The demerit of Flutter is that it needs XCode in Mac when testing.

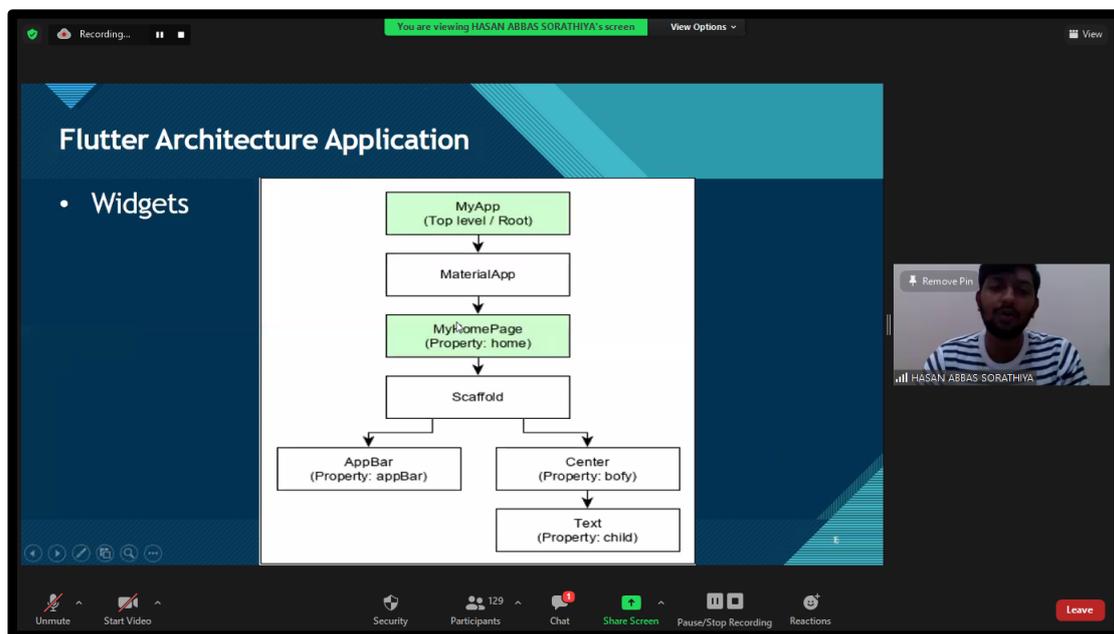


Next, he showed the participants how to install Flutter and the other software (Android Studio, Git & JDK) from the websites, how to save and extract it and check whether it was properly installed or not. Then he shared his project of 'News App' which he had already made for teaching the users on how to download and customize the app. He showed how we can change colours, styles, and theme, open a new directory, de-comment code, add/use native code in Flutter, regenerate code of a deleted file, create customized widgets and classes, change the title and many more.



He explained about Flutter Architecture Application using a flow chart. Scaffold is a package or like a widget in the MaterialApp used to make various widgets like icons, buttons, lists, etc. Then

he showed various examples using Scaffold like changing the colour of an icon, updating the screen, replace an existing screen with another one, delaying the loading time, etc.



Next, he showed the website that the participants can use to refer for colour schemes and gave information on many famous apps like Dreams 11, eBay, etc that were developed using Flutter. He also shared the link of the project for participants to practice and showed another app where we can keep our notes and customize the layout of the notes. This project is open source and can be accessed from his GitHub link.

Mr. Abbas concluded the session by thanking CSI-VSIT for inviting him. This was followed by Mr. Aniket Joshi who conveyed a hearty thanks to one and all. Further Prof. Ms. Sangeela Sagar ma'am briefed participants on tomorrow's session. In conclusion, it was a very informative and interactive session with 120+ participants and as a VSITian we feel overjoyed with the presence of Mr. Hasan Abbas who is an alumnus to come and inspire us to become successful.

Day 3: Patent & IPR on 2nd March 2022



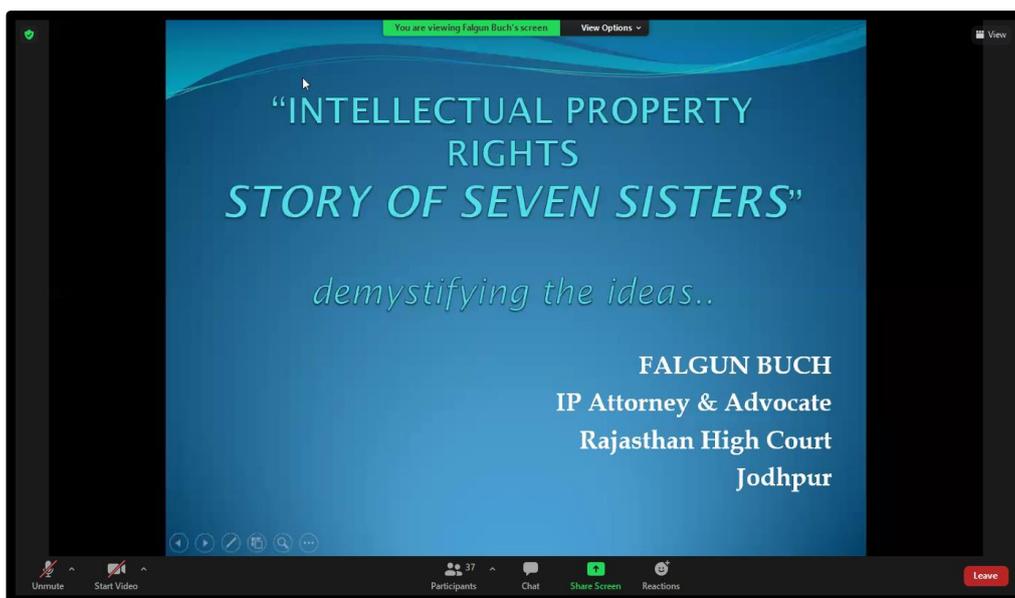
Mr. Falgun Buch

INTRODUCTION:

- Mr. Falgun Buch is an Advocate since 2013 at Rajasthan High Court, Jodhpur.
- Mr. Buch is skilled and experienced professional working in legal services industry.
- Sir practice Civil Law, Taxation, Constitutional and Intellectual Property Litigation.
- Currently Sir practice as an Independent Counsel before the Hon'ble High Court of Rajasthan at Jodhpur.

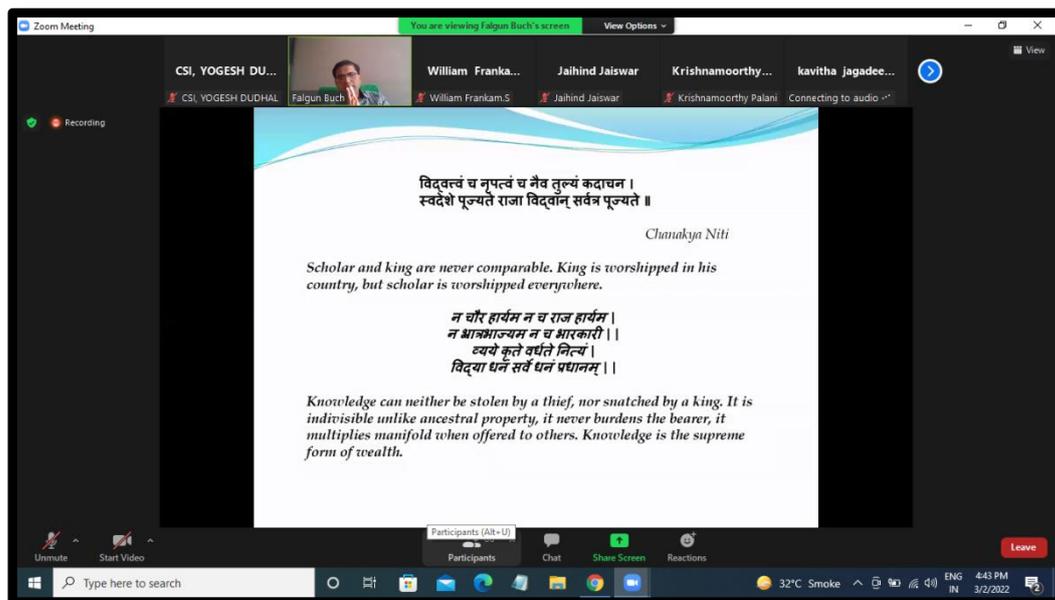
CONFERENCE DETAILS:

The One Week International e-Symposium on Recent Trends in IT v2.0 was held on Zoom Meetings under the guidance of VSIT and CSI-VSIT Committee on 2nd March 2022. The goal of e-Symposium's topic was to take a dive into becoming aware of our Rights to Reserve over Intellectual Property and Patent Filing Procedure.

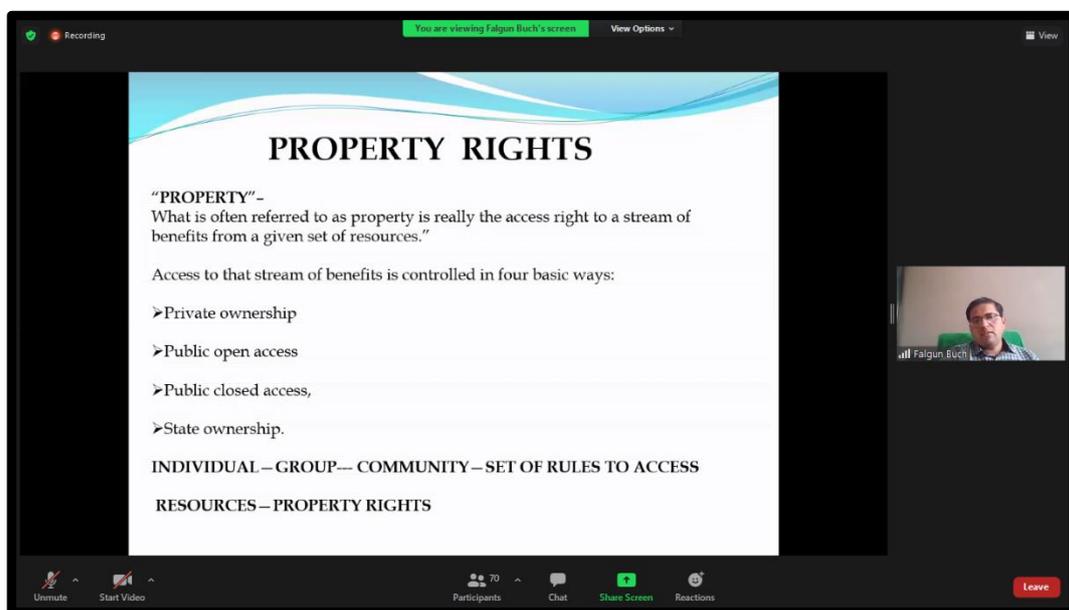


Day-3 session began with Prof. Ms. Sanjeela Sagar ma'am; CSI-VSIT Convener; greeting everyone. Followed with Ms. Tanmayee Asolkar; CSI-VSIT Member; she started with the introduction of our guest speaker Mr. Falgun Buch and talked about his credentials. She then notified our participants with some basic information about today's agenda and briefed the audience about the same.

Falgun Sir kicked off the session by relaying his gratefulness towards CSI-VSIT for granting him the stage to interact at this e-Symposium. Sir began the session by discussing about the why is it important in today's world to become self-aware about Intellectual Property Rights and India is one such country where great inventions take place every day around us. In the light of such episodes one needs to heed with the knowledge of privileges.



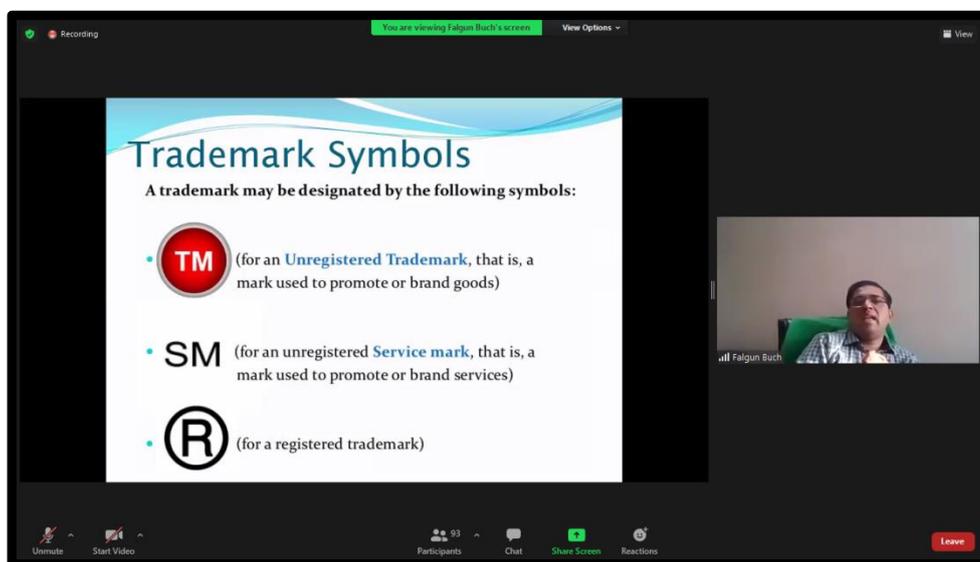
To add more clarity to the audience Sir posed a question as what defines a “property” and later explained the same. And then took a glance into few aspects of Intellectual Property Rights. Sir traced and declassified a few complexities by relating with example around day-to-day life. Falgun Sir showcased a few quotes from Chanakya Niti which signify “Knowledge is Strength”.



Progressing further Sir interpreted basics of Property Rights which bear a resemblance to bundle of rights which include rights to sell, mortgage, subdivide and grant easement. Also, Sir discussed the limitations too. Next up Sir spoke about Rights to Ownership and Possession and some popular IP (Intellectual Property) Theories namely Natural Law Theory, Reward by Monopoly, Monopoly Profit Incentive Theory and Exchange for Secrets Theory.



Afterward Sir spoke about the biggest sister amongst seven that govern Intellectual Property Rights which is Copyright. Sir gave a very brief overview about Copyrights spanning from origin to scope of Copyrights in various sectors. Later Sir also shared a few examples to relate with Types of Copyrights and Ownership Rights adjacent to exceptions where Copyrights cannot be claimed. Then shared a few tales from famous cases like Nimbuda-Nimbuda song, movies like 3-Idiots, etc.



Moving to next part of the session Sir gave participants a thorough knowledge about Trademark. Sir explained Trademarks and Service Marks. Then to make session interactive Sir conducted an exercise to identify Trademarks of the various brands. Then to add more knowledge Sir up-skilled participants over undermined topics such as Well-known Mark and Sound Mark. Moving on Sir taught which marks can be Trademarked and explained about Trademark symbols.

Recording

Important Sections under the Patents Act 1970 (Amendment 2005)

- ❑ **Section 39**
Residents not to apply for patents outside India without prior permission.
- ❑ **Section 146 (2)**
Power of Controller to call for information from patentees.

Falgun Buch

Additionally, Sir engrossed a short rundown on Industrial Design System in India. Besides that, Sir arrived at major topic of the session i.e. Patent. Initially Sir started with concept of discovery and inventions. As he heads up Sir shared the location as to where Indian Patent Offices are based with HQ being in New Delhi, India. Also perplexing it can be Sir made it easy to understand what is/are patentable like ideas, inventions, etc. Sir educated participants upon Patents Act of 1970 and also some more important sections under the Patents Act of 1970. In the process Sir used case studies like NATCO's First License Compulsory case so that the participants could relate with the terms used in the session. To sum up all Sir talked about the exception to certain inventions which are not patentable in India.

Recording

WHAT IS A GEOGRAPHICAL INDICATION?

Geographical Indication is an indication which identifies goods as **agricultural goods**, **natural goods** or **manufactured goods** as originating, or manufactured in the territory of country, or a region or locality in that territory, where a given **quality**, **reputation** or **other characteristic** of such goods is essentially **attributable to its geographical origin**.

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Falgun Buch

As anxious as our participants were Sir targeted key points and articulated the session so well that the participants were anticipating for more knowledge. As time left was too less yet Sir managed to give short overview of Geographical Indications which add to factors governing Intellectual Property Rights. Reaching at this juncture Sir instigated a FAQ session and interacted with the participants and resolved the queries with sequelae of contentment.

To conclude, it was a fantastic and a very catchy session by Mr. Falgun Buch with 90+ participants and a perfect blend of knowledge that participants need about Patent and Intellectual Property Rights. In the end Falgun Sir expressed his thankfulness towards CSI-VSIT and participants for being good listeners and taking up the doubts with him as it portrayed the willingness of the participants to learn. Later Ms. Tanmayee Asolkar conveyed Vote of Thanks to our guest thus concluding the session.

Day 4: Personal Branding on 3rd March 2022

CONFERENCE DETAILS:

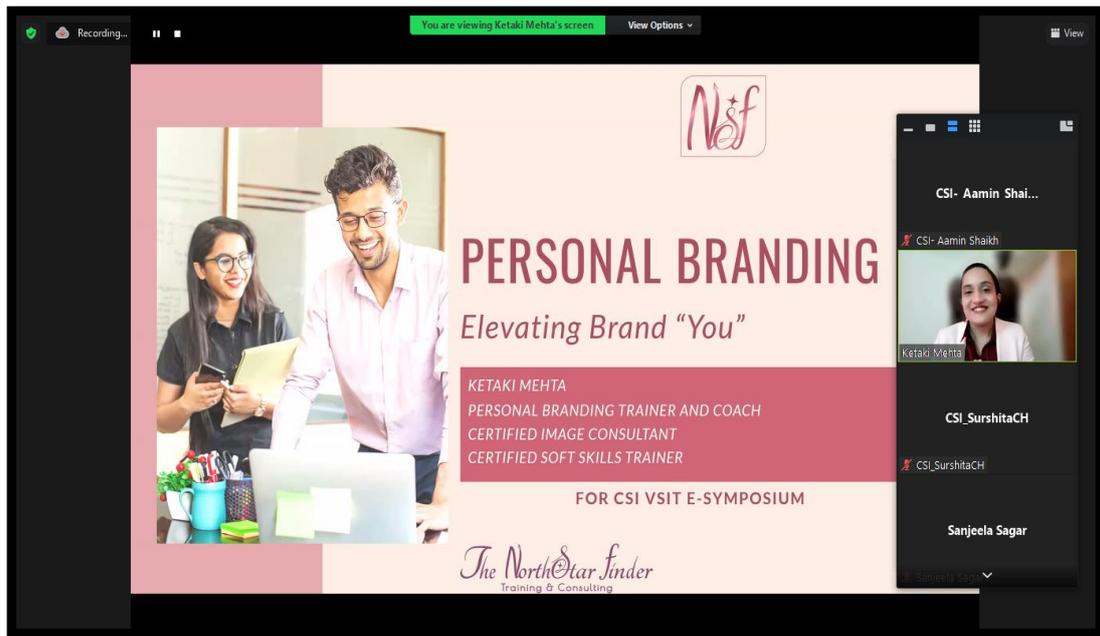


Mrs. Ketaki Mehta

INTRODUCTION:

- Ms. Ketaki Mehta is a Personal Brand Enabler for working and business professionals. She is also a certified soft skill / corporate trainer.
- At present, she works in North Star Consulting. She was also a senior business analyst for Vernost Marketing Technology Solutions Pvt. Ltd.
- Ma'am holds a degree in MBA from Symbiosis International University majoring in Operations Management.
- Additionally, she is also an Alumni at Vidyalkar School of Information and Technology.

After 3 consecutive & successful events of one week e-symposium, it was day-4 of the week on recent trends in IT v2.0 organised under the guidance of Prof. Sanjeela Sagar ma'am and CSI-VSIT Committee on Zoom Meetings on 3rd March 2022. Since the motive of the session was to up skill one with personality development and so event's topic was personal branding.



The event initiated with a small greetings to everyone present there by Ms. Sanjeela Sagar ma'am. Later member of CSI Committee; Ms. Surshita Cheripalli; took upon the stage to introduce guest speaker of the day alongside with her proficiency and also basic agenda of the session.

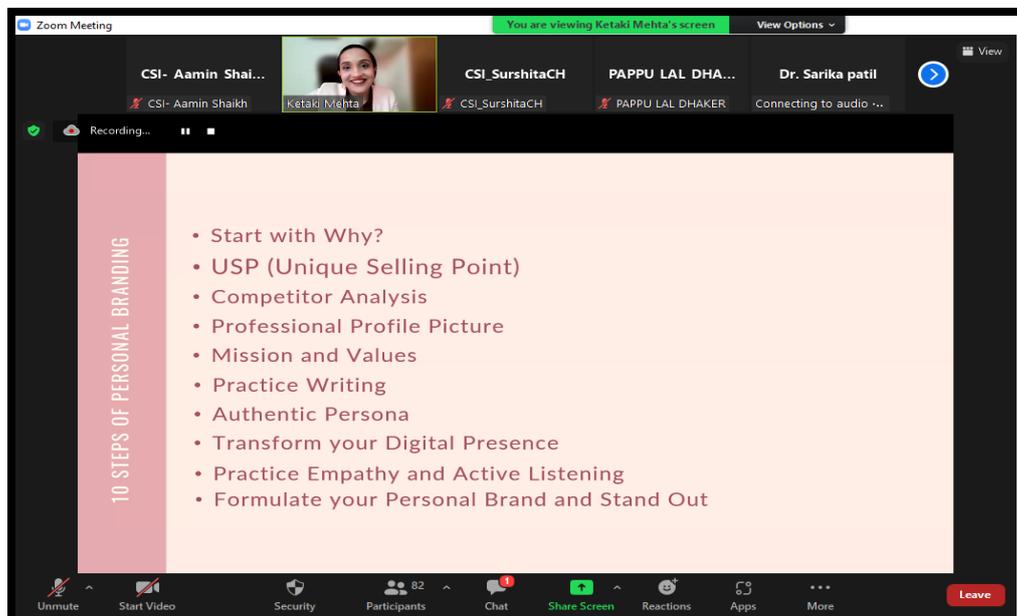


Ketaki ma'am explained all the meaning of 'Personal Brand' while telling that it is nothing but "Impact that you create after leaving the room" or "position you possess in front of others". Later she discussed the topics to be covered during the session. Adding little fun at the very beginning, ma'am took an activity where she asked about everyone's mood-o-meter using colours, in which participants interacted enthusiastically. Stating a Japanese concept 'IKIGAI' she conducted an activity where she told reasons or the questions that need to be addressed by one's own self. Later as being the facilitator, she formulated personal brand's 'ABCDE' which are said to be 5 pillars of personal branding.

- (i. Appearance
- (ii. Behaviours
- (iii. Communication
- (iv. Digital presence
- (v. Executive presence

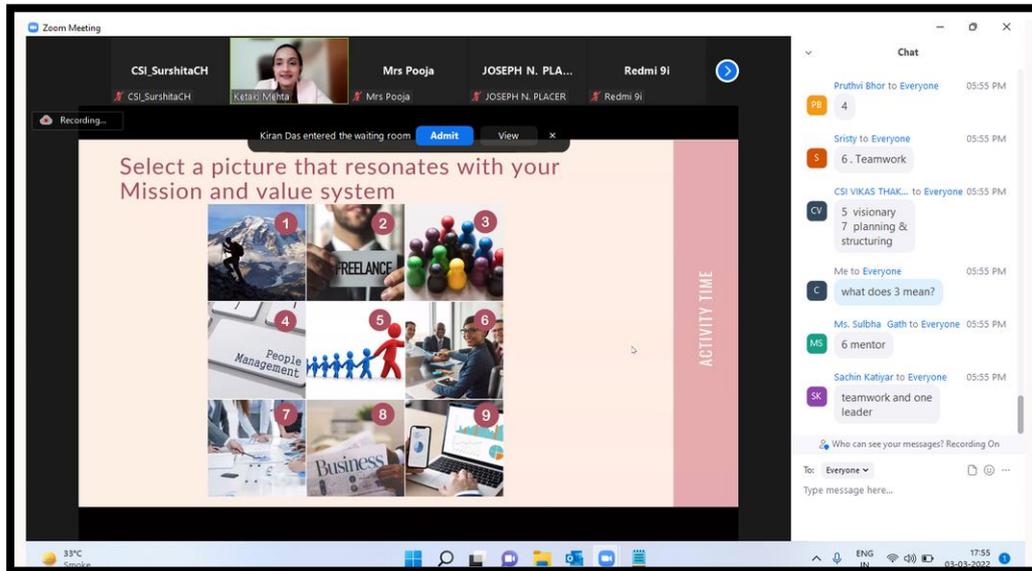


To understand this concept more precisely she explained each point one-by-one using the PowerPoint presentation she prepared and in relation with examples of some high profiled people. After this, she took a glance on aspects of personal branding where she spoke about the 10 necessary steps of personality development with the participants.



Carrying forward she jumped on the foremost topic i.e. Building self-portrait on LinkedIn, a structured and impactful digital persona. She wanted to anticipate everyone the objectives of what one can achieve having an effective LinkedIn profile thus interpreting on the following thesis she spoke upon 5 important aspects of LinkedIn which include a better profile image with a

befitting cover picture, a striking headline, short & crisp summary that gives brief about yourself and the last point skills and achievements. She set some examples of some renowned famed personalities, influencers and even her own built portfolio in front of the audience to add more clarity in it. Just to make the session more interactive and collaborative she took an interesting activity where she asked the participants to select pictures which resonates their goals and missions.



Next up she focused on skills and endorsement analysis where she taught how to create personal and interpersonal skills along with some other important features like LinkedIn etiquette adding more insights & powerful content strategy with consistent article postings etc. besides this, all the do's and don't were covered up. She also explained dressing sense considering it as predominant part of personal branding.

Hence concluding, Ms. Ketaki Mehta made sure not to fall short of anything and covered as much as possible within those mean hours. Majority of participants were beyond 70+ count. At last ma'am readily solved every participants doubts. The enthusiasm and joy of participants made her feel overwhelmed. In the end member of CSI-VSIT Committee; Ms. Surshita Cheripalli; expressed vote of thanks to our guest speaker and all the good listeners.

Day 5: Applications of GIS on 4th March 2022



Mr. Eric Mandwiwala

INTRODUCTION:

- Mr. Eric Mandwiwala is a GIS Data Engineer II.
- He has done his Bachelors in IT from Vidyalankar School of Information Technology.
- He also worked as a GIS analyst, where he did the analysis and created products for customers and did projects with companies such as BMW, Mercedes, and Audi.
- He has completed his masters in IT from VSIT and holds good knowledge of Data Mining.
- He works as GIS Data Engineers II at HERE Tech.



Mr. Pratik Vaishnav

INTRODUCTION:

- Mr. Pratik Vaishnav has been working as GIS Data Engineers I at HERE Technology from past 4 years.
- Mr. Pratik Vaishnav has completed his post-graduation diploma in Data Science.
- While Mr. Pratik Vaishnav has completed his BSc. In Computer Science from Nagindas Khandwala College.

CONFERENCE DETAILS:

The One Week International e-Symposium on Recent Trends in IT v2.0 was held on Zoom Meetings under the guidance of VSIT and CSI-VSIT Committee on 4th March 2022. The goal of e-Symposium's topic was to take a dive into immense pool of GIS and applications of GIS.

Day-5 session began with Prof. Ms. Sanjeela Sagar ma'am; CSI-VSIT Convener; greeting everyone. Followed with Mst. Mayur Panicker; CSI-VSIT Member; He started with the introduction of our guest speakers Mr. Eric Mandwiwala and Mr. Pratik Vaishnav and talked about their credentials. He then notified our participants with some basic information about today's agenda and briefed the audience about the same.

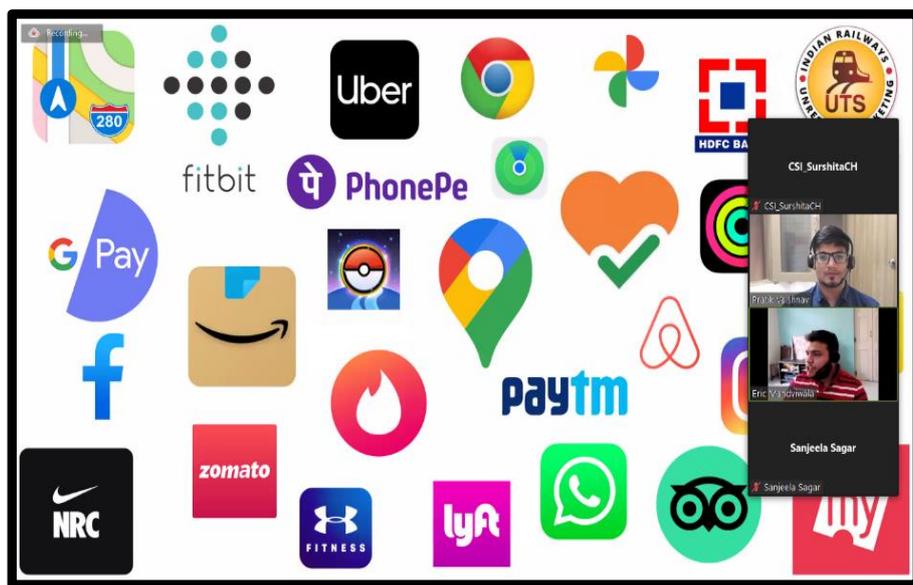


Our guest speakers, Mr. Pratik Vaishnav is GIS Data Engineer I, he briefed about himself to the audience, from the very beginning he was more into Computer Science, Core programming and Statistics he worked as a GIS analyst. Later, in his career when he came across a designation of post called as Data scientist, he pursued a diploma course in data science and learnt about Machine Learning and Data Visualization. Currently Sir is working on solutions to customer requirements, data flow architecture and technical analysis.

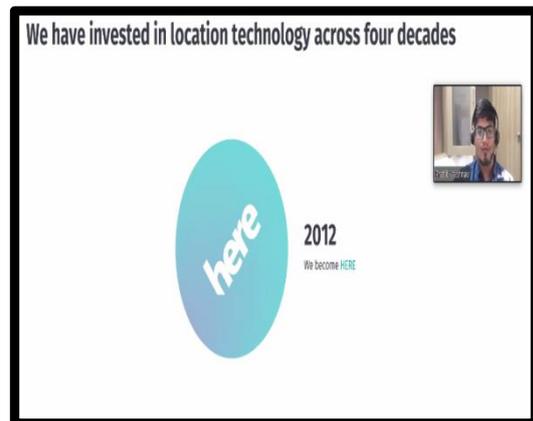
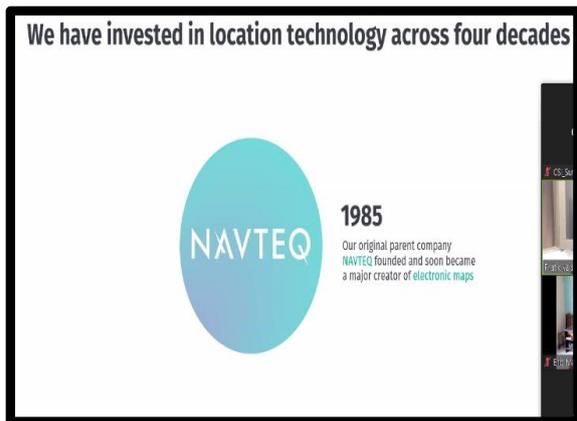


Mr. Eric Mandwiwala is a GIS Data Engineer II. He has done his Bachelors in IT from Vidyalankar School of Information Technology, worked as a GIS analyst, where he did the analysis and created products for customers and did projects with companies such as BMW, Mercedes, and Audi. He has completed his masters in IT from VSIT and holds good knowledge of Data Mining. Journey of both our speakers have been similar and now they both are working together as Data Engineers at HERE technology.

Mr. Eric began the session by sharing a picture depicting a lady holding a smart phone in her hand, this smart phone has a lot of applications such as Swiggy, Zomato, Amazon, Flipkart, OYO, PhonePe, Google Pay, Google, YouTube, etc but what makes all these apps stand in one category? A common point in all of these apps is that they use location services; almost every app in our smart phone tracks our location. Whether it is a product selling application, a service selling application or any simple utility tool, our location is being tracked and saved by these applications on daily basis without us being aware of such facts. Mobiles apps such as Nike Run Club tracks activity of people and our recent very popular Aarogya Setu app which uses location services to trace Covid-19 cases; every time we use these services our location is being tracked in the background constantly. Not in terms of penetrating privacy but to give us more tailored experience.



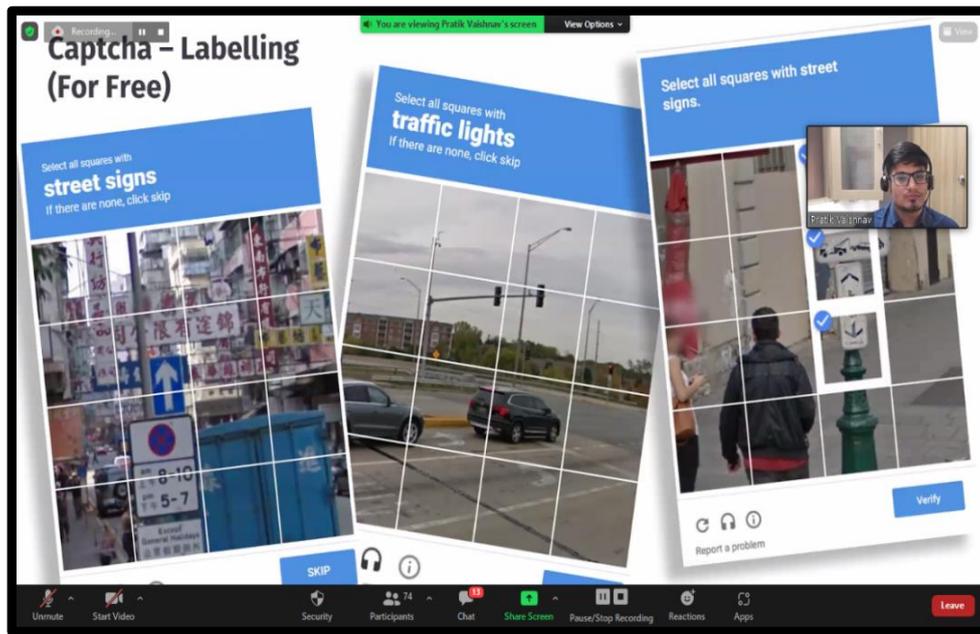
After which he handed over to Mr. Pratik who addressed the audience. They both are from HERE technologies. Its parent company was Navteq which invested into location technology across 4 decades. It is a Netherland based company and have served worldwide. They provide location services through their GPS navigation software's and have been into tough competition with big Giants like Google Maps. Navteq was then acquired by Nokia in 2007 and it was renamed as HERE in 2012. Later in 2015 it was owned by Volkswagens group along with BMW and Mercedes-Benz Group, in 2017-19 companies such as Intel and Mitsubishi Corporation and NTT also joined by investing in it. He then jumped to a video describing what they do at HERE technologies.



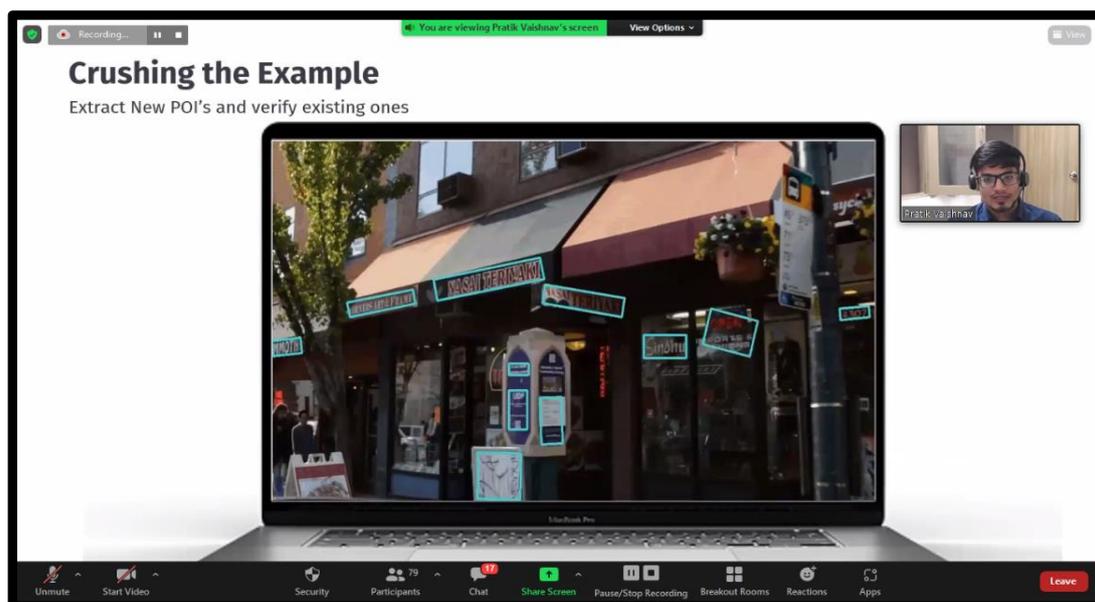
Here technologies ranked #1 location and technology platform outranking Google maps, map box, TomTom, and Apple. Then he described a picture showing hand drawn map in earlier history which was used for just mapping of continents while explaining the complexities of modern-day maps which includes minute details of surroundings. After which he introduced us with 2-D maps, its features, and use cases while explain how they evolved with 3-D maps and its features over time.



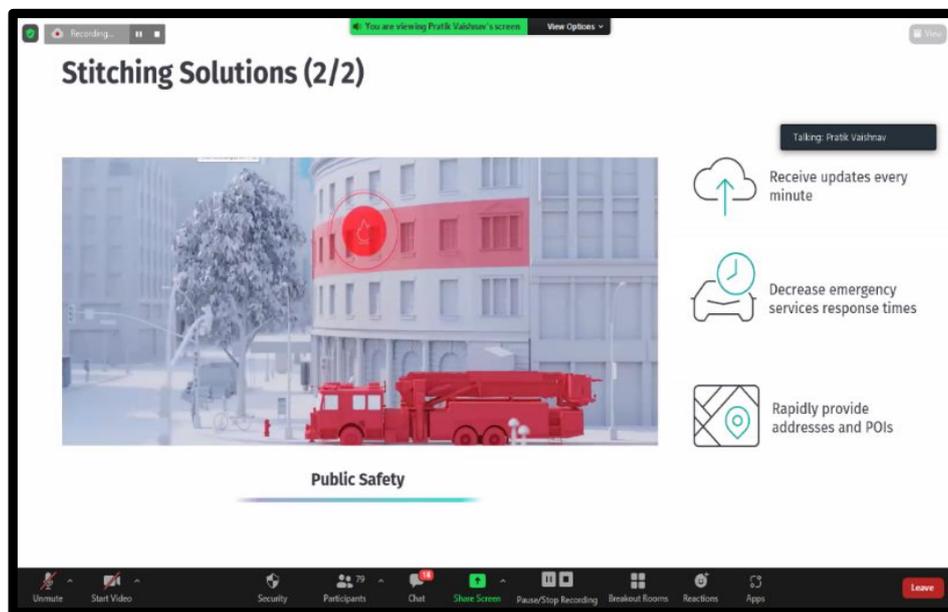
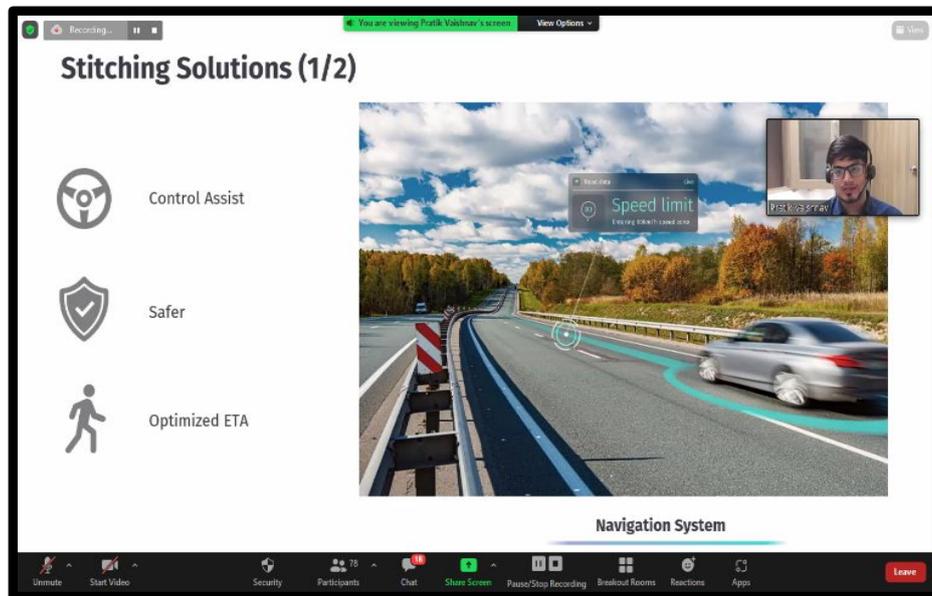
Out of the vast areas of GIS a small but complex and interesting topic of location and mapping was shared with us. First data input was Street Level Imagery (SLI), capturing and representation of real-life street views, road signs, how websites use Captcha labelling from users for detection and verification of objects in the Image.



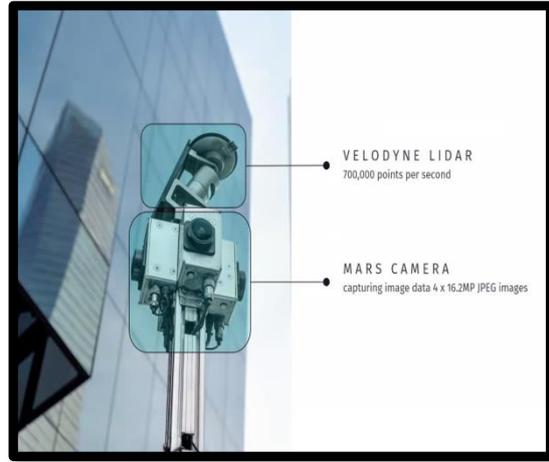
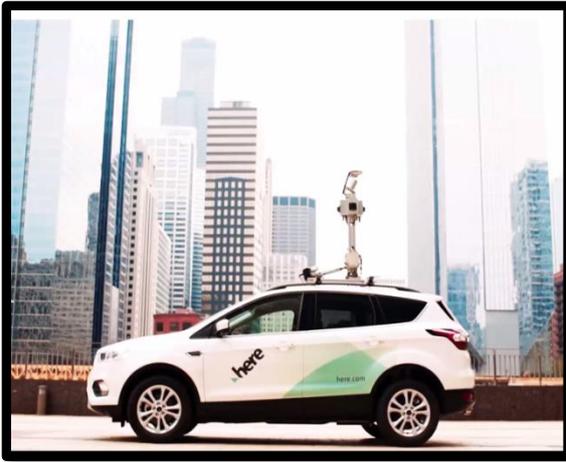
Then we looked into what all things can be extracted from the captured videos and images, more than 184 road and traffic signs, bridges and tunnels, painted or physical dividers, road lanes, busy routes, point of interest such as petrol pump, restaurants, banks, etc. access restrictions for vehicles or pedestrians and more than a thousand features are being extracted. After the extraction of these data, they have to be mapped with the virtual reality, in terms of process it has two types; first is traditional approach where manual process is followed and second is current approach where backend process is followed for street level imagery with AI and ML. Once the boards and signs are detected they must be referred properly, after which text recognition is carried out and compared with the existing data in database, if there's a new data it is added or else just verified with existing one.



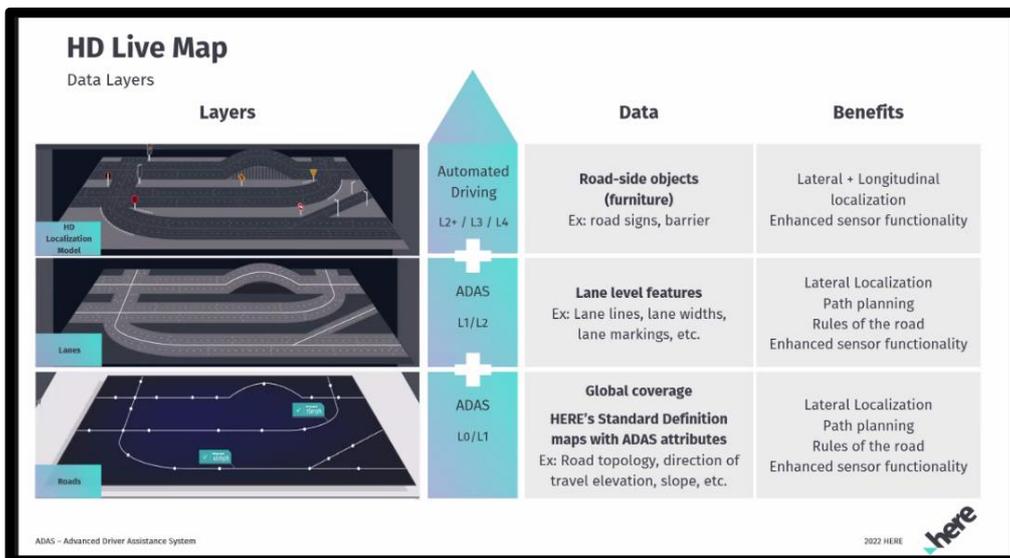
Stitching solutions, it gives us the Control Assistance of whatever is moving around us on the road, so the 1st solution that comes from SLI is Navigation System and the 2nd is Public Safety, for example fire hydrants could be located easily in an area in case if some apartments or public places catches fire. It receives update every minute and decreases the emergency services response time. It receives update every minute and decreases the emergency services response time.



Then our speaker Mr. Eric Mandwiwala took over and started with the introduction of LiDAR (Light Detection and Ranging). It is a device that is fitted on a car. It consists of cameras and sensors to capture speed and distance along with LiDAR which shoots laser lights and creates infrared dots. It is placed and configured in a specific angle to capture more data with precision. Then he shared a picture of VELODYNE LIDAR that produces 70000 dots per second, below which is a MARS camera which has fisheye lens that captures image data at 4x 16.2 MP JPEG images.

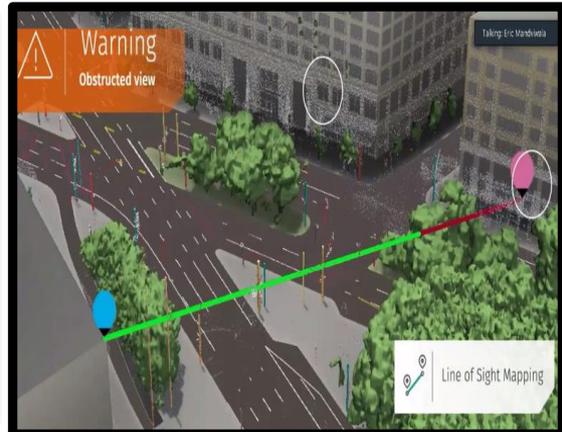
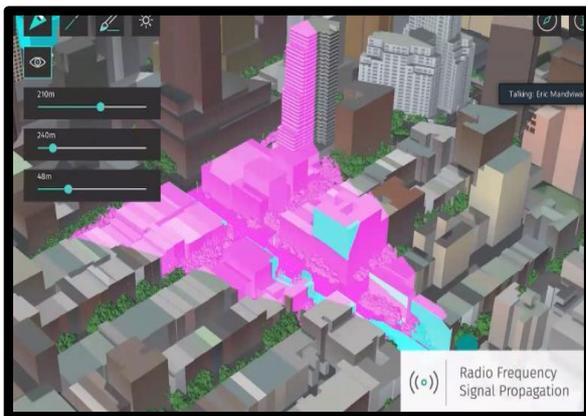


Then we came across HD live maps, in autonomous car there are 5 levels of ADAS (Advanced Driver Assistance Systems) system, L1 gives the global coverage through standard definition maps with ADAS attributes e.g.: Road topology, slope, etc. L2 includes the L1 features and provides Lane level features e.g.: lane lines, lane widths, etc. L3 along with the features of L1 and L2 provides Road-side objects detection e.g.: road signs, barriers, etc. at L3 we enter to conditional automation and at L4 we get high automation of vehicles, L5 which is still under development will provide us full automation. A video was played which explained how deep learning is used at HERE technologies for making HD maps, how the car interprets all these data and take action accordingly.

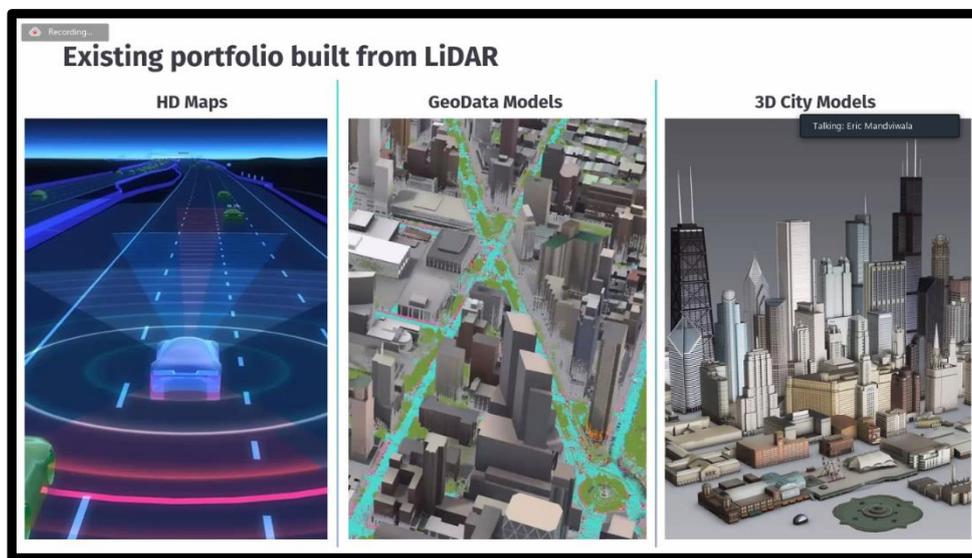


But that's not all; we were bombarded with the knowledge of geo-data, theory and structure of 5G trials, its benefits, and drawbacks, digital site surveys. He explained us how Geodata can be

used to the precision where height, depth and width could be detected, and accidents could be avoided.



Then we moved towards the 3-D city mapping, a replica of real world, powered by the advanced location intelligence and highly precise dimensions. The explanation of existing portfolio builds from LiDAR that are HD maps, Geodata models, 3-D city models. Then he took a question from a participant and answered why satellites can't be used for 3-D mapping as they are limited to the top view with 2D mapping only while LiDAR and Geodata have an edge over it and along with the electric vehicles it is also used in non-electric vehicles. Moving ahead he explained how autonomous as well as connected driving is important along with other use cases such as accidents prevention, supply chain, on demand navigation in urban mobility.



To sum it up, all these markets such as automated driving, urban Mobility, infrastructure planning, public safety, supply chain, connected driving, and fleet management are being penetrated. We also watched a small clip on the concept of autonomous world and also how HERE technologies are working constantly to achieve this. Reaching at this juncture Sir instigated a FAQ session and interacted with the participants and resolved the queries with sequelae of contentment. He also recommended us to watch a Netflix series named Billion Dollar Code if any person holds interests in GIS technology.



After which both our speakers thanked the audience for patiently listening to them and hoped that everyone gained some knowledge from this session. To conclude, it was a fantastic and a really informative session by Mr. Eric Mandiwala and Mr. Pratik Vaishnav. It was a perfect blend of knowledge that participants need about GIS applications. In the end Mst. Mayur Panicker conveyed Vote of Thanks to our guest followed by Ms. Sanjeela Sagar Ma'am thanking our Principal Dr. Rohini Kelkar Ma'am, Vice Principal Mr. Asif Rampurawala Sir and CAO Dr. Sarika Chouhan Ma'am. All the participants thanked CSI-VSIT for organising such an informative International e-Symposium and hoped that more events like this would be conducted in near future thus concluding the Symposium.



Summary

Booklet of VSIT's second most e-Symposium on "Recent Trends in IT" is now ending. We as a Core-committee of CSI-VSIT Mumbai Chapter would like to take this opportunity to extend our sincere gratitude and appreciation to all of you, for your invaluable contributions in making this event a great success.

We had a wonderful journey of five days which was interesting and informative. Through a wide range of keynote speeches and discussions, we have been presenting with current and upcoming trends in IT Industry. We hope that you liked the information shared and you will convey your experiences with others from near and far, and that a cordial relationship established among us during this Conference will further strengthen. But, of course, the real measure of this symposium's success lies in how it will affect you or more precisely, how it will affect the actions you will take while implementing these concepts.

We look forward to organize new events, workshops, and seminars for you all. We hope that all of us will imply the knowledge what we have gained through this conference. Before we conclude, we would like to invite all of you for all the events we are planning further. Thank you for attending this conference and have a safe journey ahead.