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Lucknow Chapter

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GLIMPSES OF MISCELLANEOUS EVENTS

Message from Hon. Secretary

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Dear Friends,

In the beginning, I would like to put on record my gratitude to all IT companies on behalf of CSI, Lucknow Chapter for facilitating, patronizing and sponsoring the Tech-Talk sessions conducted during the period from July to September, 2023. Overwhelming response and participation of CSI members have made these Tech-Talks sessions every successful events.

The Tech-Talk sessions have been turned into the learning events for the CSI professionals. These sessions encourage us and increase our level of satisfaction that the maximum number of CSI-professionals are getting benefitted and they are enhancing their knowledge. I hope this will keep on going with the support and blessings of everybody.

Friends, as you know, CSI, Lucknow Chapter also publishes the newsletter "TechWings@CsiLko" on quarterly basis, which is right now in your hands. The professionals are always welcome for sending articles/papers to be published in this newsletter. They should not wait for "invites" or "reminders" and may send them anytime on the e-mail address of Shri Deepak Sharma, Chairman, CSI, Lucknow Chapter (deepak.sharma@nic.in) or to me (shyamatbird@gmail.com) or on the e-mail address of any members of CSI Management Committee.

Finally, our great festival- Deepawali is on card in the month of November, 2023. I wish the festival of Deepawali illuminates your life with lights and colours.

A very Special and Shubh Deepawali to all dear friends of CSI fraternity and your family members!

Please do not forget to send me your views on this newsletter.

Regards

(Dr. Shyam Kumar Garg)
Hon. Secretary,
CSI, Lucknow Chapter

A TECH-TALK SESSION TECHSHALA ON "LEARN HOW TO PROTECT YOUR APPLICATIONS AND NETWORK FROM EVER EVOLVING CYBER THREATS" IN ASSOCIATION WITH FRUX and PENTACLE ON 21ST JULY 2023 AT HOTEL GOLDEN ORCHID, LUCKNOW

Computer Society of India, Lucknow Chapter organized a Technical Session Techshala on "Learn How to Protect Your Applications and Network from Ever Evolving Cyber Threats" in association with FRUX and PENTACLE on 21st July 2023 at Hotel Golden Orchid, Nirala Nagar, Lucknow. Computer Society of India Lucknow Chapter welcomed and felicitated Guest Speakers and offered gratitude to them for sparing their valuable time. Mr. Vinay Kumar Johri, Vice Chaiman CSI Lucknow Chapter covered the whole event.

The Keynote Speakers were Mr. Anshul Saxena, Chief Executive Officer from Haltdos and Mr. Bala Manoharan, Chief Technical Officer from SecneurX. Mr. Saxena and Mr. Manoharan covered various Aspects of Cyber Threats and how to protect the Hardware Systems, Operating Systems and Various Applications being used by an Organization/Institution/Individuals. The Session was closed with an Interactive Session wherein Participants took active part and raised their queries to the Guest Speakers. Both the Speakers answered all the queries to the satisfaction of the Participants.

Mr. Deepak Sharma, Chairman and Mr. Harish Chandra Gupta, ex-Chairman CSI Lucknow Chapter offered Mementos to the Guest Speakers. Mr. Arvind Sharma, Regional Vice President Computer Society of India offered Vote of Thanks to the Guest Speakers - Mr. Anshul Saxena and Mr. Bala Manoharan and the August Audience present in Technical Session.

The Event came to an end after dinner and networking of the participants discussing various aspects covered in the Technical Sessions.

Some Glimpses of the Event :

Faculty Development Programme at SRMCEM, Lucknow

Computer Society of India in association with Department of CSE, IT, MCA & BCA of Shri Ramswaroop Memorial College of Engineering and Management (SRMCEM), Lucknow has Successfully Concluded Five Days Faculty Development Program on "Recent Trends in Artificial Intelligence and Cyber Security" from 01st to 05th August 2023. The objective of the Faculty Development Program (FDP) was related to Artificial Intelligence (AI), Machine Learning (ML) and Cybersecurity is to enhance the skills, knowledge and capabilities of faculty members, researchers and educators in these critical and rapidly evolving fields. FDP was designed to equip participants with the latest trends, tools, techniques and best practices in AI, ML and cybersecurity, enabling them to effectively teach, research and contribute to advancements in these domains. The FDP provided a platform for participants to delve into various topics and acquire expertise in the rapidly evolving fields of Artificial Intelligence and Cyber Security.

In the FDP a total of ten sessions were conducted on different topics related to Artificial Intelligence, Machine Learning and Cyber Security. The following speakers from CSI Lucknow Chapter delivered lectures as per the schedule for the FDP program.

1. Prof. (Dr.) Arunabha, Mukhopadhaya, Professor IIM, Lucknow and Member- Management Committee, CSI Lucknow Chapter delivered lecture on topic Cyber Risk Management.
2. Dr. Shyam Kumar Garg, Retd. Deputy General Manager, NABARD, Lucknow and Honorary Secretary, CSI Lucknow Chapter delivered lecture on topic Digital Banking and Cyber Security.
3. Dr. Puneet Misra, Assistant Professor, Dept. of Computer Science, Lucknow University and Member- Management Committee, CSI Lucknow Chapter delivered lecture on topic Machine Learning and Time Series Analysis.
4. Mr. Satyendra Kumar Gupta, CEO- FACTORY-FX and Member- Management Committee, CSI Lucknow Chapter delivered lecture on topic Digital Forensics.

The convener of FDP was Dr. Pankaj Kumar, Professor & Head, Department of CSE, SRMCEM and Member- Management Committee, CSI Lucknow Chapter.

The FDP was divided into two section Lecture delivery session and an interactive session. The Lecture delivery session was having 2 hours and the interactive session was 45 minutes. In the Lecture delivery session, speakers delivered a lecture about their topic and in the interactive session, participants discussed their queries related to the topic as well as their research planning directly to the speaker.

More than 40 persons from different institute like Babu Banarasi das Engineering College Lucknow, Teerthanker Mahaveer University Moradabad, IMRT, Lucknow, etc. registered themselves for the FDP.

Throughout the FDP, all participants actively shared their experiences and knowledge, availing themselves of the opportunity to learn from one another. The CSI Lucknow Chapter looks forward to continued support in upcoming development programs and encourages the academicians to stay connected with the latest advancements and trends in technology and development.

Some Glimpses of the Event :

Tech-Talk on "The Path to Digital Leadership with Open Hybrid Cloud"

In coming days, the open hybrid cloud solution will enable the IT professionals to run any application or workload consistently across any footprint, including on-premise, at the edge and in the cloud. The system developers will quickly build, deploy and manage applications by simplifying, automating and securing processes with open hybrid cloud.

As the open hybrid clouds will have a significant impact in the area of Information Technology, Computer Society of India, Lucknow Chapter organized a Tech-Talk Session on “The Path to Digital Leadership with Open Hybrid Cloud” on 23 August 2023 (Wednesday) in association with Red Hat India Private Limited.

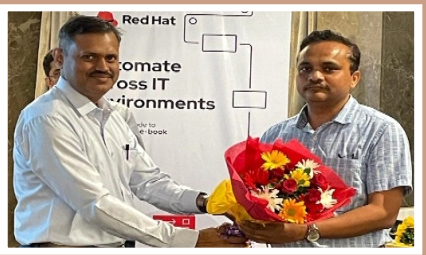
The prominent speakers of Red Hat India Private Limited, were Sh. Anuj Mittal, Head-Sales, Specialist-Emerging Technologies, Sh. Afzal Khan, Senior Sales Specialist- Emerging Technologies and Sh. Awadhesh Singh, Specialist-App Platform- Emerging Technologies.

Initially, all speakers were welcomed with the bouquets of flowers by Sh. Satyendra Gupta, Dr. Pankaj Kumar and Sh. Balendu Jaiswal, Members of Management Committee of CSI, Lucknow Chapter. Dr. Shyam Kumar Garg, Hon. Secretary, CSI, Lucknow Chapter introduced the speakers to the audience.

During the session, the speakers explained about Open Hybrid Cloud- a mix of on-premises and third-party cloud computing infrastructure for business operations and how it is so relevant in today’s context. The speakers also clarified and discussed the various issues such as divided maintenance cost, security cost, owning the control on application, compatibility, privacy, integration of data base, compromising on functionality, etc. The session was appreciated by all the participants.

At the end of the session, mementos to the Speakers were presented by Sh. Vinay Kumar Johri, Vice Chairman, CSI Lucknow Chapter, Sh. Sanjiv Gahlot from NIC and Sh. Rajesh Mehtani. Dr. Shyam Kumar Garg delivered the Vote of Thanks to all the guests, representatives of various departments, sponsors and other dignitaries. The session was concluded followed by dinner.

Some Glipses of the Event :



Technical Session on "AI-Powered DevSecOps platform"

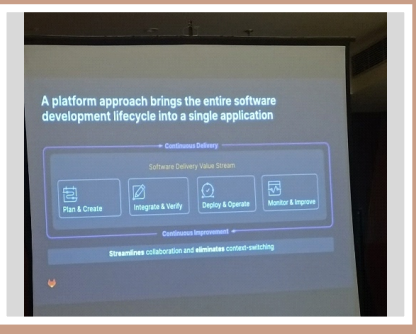
Computer Society of India, Lucknow Chapter organized a technical session in association with GitLab on 26th September 2023. "DevSecOps platform" is considered as one of the platforms of empowering organizations to maximize their overall return on software development in a secured environment. The main speakers of the session were Sh. Ishan Padgotra, Strategic Account Leader, and Sh. Amit Kaul, Head, Channel Sales of Gitlab Private Limited. Sh. Arun Dir, Director, RTS also spoke to the participants.

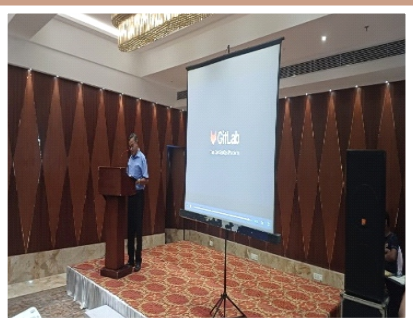
In the beginning of the session, Dr Shyam Kumar Garg, Hon. Secretary, CSI, Lucknow Chapter explained the importance of topic and how this topic is relevant to the Developers, Development Team Managers, Security Leaders and Data Centre Administrators in today's era. After that, Dr. Garg, introduced the learned speakers. The speakers were welcomed by Shri R.A.S. Tyagi, Shri L.R. Yadav and Shri Rakesh Puri (Ex-Chairmen, Lucknow Chapter) with the bouquets of flowers.

The learned speakers started the session by explaining how organizations are building more software than ever before and are under tremendous pressure for embedding security deep into software development life cycles and complying with regulatory and industry mandates. Different features of DevSecOps Platform for software innovation in Project planning, Source code management, Continuous integration, Infrastructure configuration, Incident monitoring and Application security were also explained.

Finally, the mementos were presented to the speakers by Shri Deepak Sharma, Chairman and Shri Vinay Kumar Johri, Vice Chairman, CSI, Lucknow Chapter. The vote of thanks was delivered by Dr. Shyam Kumar Garg and participants were invited for the dinner.

Some Glimpses of the Event :





DIGITAL PARENTING A PRIORITY

- Dr Dheeraj Mehrotra
Principal, Kunwar's Global School, Lucknow
E-mail : www.kunwarsglobalschool.com, principal@kunwarsglobalschool.com

It is more necessary than ever for parents to take an active part in supervising their children's usage of technology in today's increasingly digital environment. This is especially true for younger generations. The process of assisting children in developing safe and healthy behaviors while using technology is referred to as "digital parenting," and it is an essential component of contemporary parenting.

Children are introduced to various forms of technology at a very young age, demonstrating how deeply embedded technology has become in our everyday lives. According to recent research, toddlers as young as two years old are already utilizing mobile devices. [Citation needed] Technology presents children with both opportunities and dangers. Opportunities include access to educational resources, social connections, and entertainment. dangers include the possibility of being exposed to inappropriate content. The practice of digital parenting may assist youngsters in securely and ethically navigating the internet environment.

When it comes to parenting in the digital age, protecting children online should be one of your top priorities. Children run the risk of seeing improper information, being bullied online, and being targeted by online predators when they go online. Parents who have children who use digital devices need to be aware of the dangers that their children face and should take preventative measures. This might involve putting parental controls on devices, limiting the amount of time kids spend in front of screens, and teaching them how to be safe when using the internet.

When it comes to the use of technology, parents may also play a role in assisting their children in the development of good habits. An excessive amount of time spent in front of electronic media may have adverse impacts on children's health and development, including increased risk of obesity, disturbed sleep patterns, and poor academic performance. Reading, playing outdoors, and spending time with family and friends are just some of the things that digital parents may encourage their children to participate in while still establishing limits for their children's screen usage.

Parenting in the digital age may help children learn critical life skills in addition to improving their safety and encouraging healthy behaviors. Children who are acquainted with technology will have a substantial edge in the employment market since technology is playing an increasingly essential role in the workplace. Coding, digital design, and the administration of social media are all areas in which digital parents may assist their children in developing abilities. Parents also have the ability to inspire their children to utilize technology as a means of creative expression and to solve problems.

Setting a good example when it comes to how to utilize technology is an additional crucial component of digital parenting. Children pick up behaviors by watching their parents, so if their parents are always on their phones or other electronic gadgets, it's possible that their behavior will be the same. Parents who have children who use technology should restrict the amount of time they spend in front of their own screens, participate in activities that don't include their devices, and be present when interacting with their children.

Parenting in the digital age also presents a chance for parents to connect with the children they are raising. Parents may discover common ground with their children and have meaningful interactions with them if they educate themselves on how their children utilize technology and the interests they have in it. This may assist create trust between parents and children and deepen the bond between the two.

In a nutshell, being a responsible adult in the digital world is an essential component of contemporary parenting. It may assist youngsters in maintaining a healthy online presence, developing good habits, and developing essential life skills. Parents who have children who use technology need to take the initiative to educate both themselves and their children on how to use technology in a responsible manner. Parents who use technology effectively may help their children have a happy and secure experience when they go into the online world by setting a good example themselves in terms of how they interact with technology and by having meaningful dialogues with them.

CHANDRAYAAN- 3: “Engineering India's Lunar Triumph"

- Jagjeet Singh and Devarsh Kumar Sahoo
B.Tech-AIML-3rd Year, SRMCEM, Lucknow

Introduction to Chandrayaan 3:

- Our celestial companion, the Moon, has long captivated humanity's imagination in the great expanse of the cosmos. The lunar sphere has always fascinated and awed people, from ancient mythology to current science fiction. But the Moon is more than simply a faraway object in the night sky for India; it is a place of adventure and scientific discovery. Welcome to the third installment of India's space odyssey: Chandrayaan 3.
- We commend ISRO Chief S. Somnath and Prime Minister Narendra Modi for their outstanding leadership and commitment, which resulted in Chandrayaan 3's tremendous success. It is really admirable how dedicated they have been to strengthening India's space exploration capabilities. This accomplishment not only demonstrates India's superiority in space technology but also the country's unwavering will to explore the cosmos. It is a credit to their inspirational leadership and the many scientists' and engineers' tireless efforts that this amazing mission became a reality. The accomplishment of Chandrayaan 3 is a source of great pride for the country and shows how far India's space projects can go with their leadership.

The Need for Chandrayaan 3 and its Objectives:

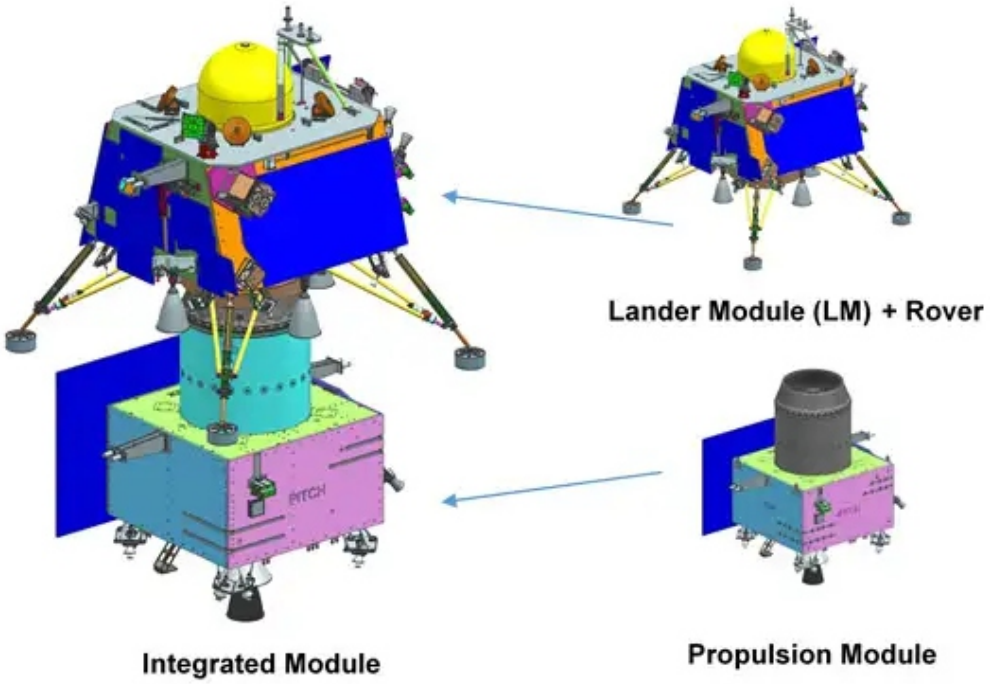
- Chandrayaan 2 faced a setback when the Vikram lander failed to make a soft landing in September 2019.
- Chandrayaan 3 is an attempt to rectify the shortcomings of Chandrayaan 2 and demonstrate India's capability to land on the Moon.
- The major goal of Chandrayaan 3 is to successfully land on the lunar surface, with a focus on the south pole area.
- It will carry scientific instruments to perform experiments and collect data on the composition, geography, and mineral resources of the Moon.

TECHNOLOGY AND ENGINEERING:

Chandrayaan-3 consists of different payloads. Payload means apparatus. Let’s understand about each payload:

Let's divide the whole project into 3 parts.

- Propulsion Module (PM) which has 1 payload.
- Vikram lander which has 4 payloads.
- Pragyan rover which has 2 payloads.



PROPULSION MODULE PAYLOAD:

1. Spectro-polarimetry of Habitable Planet Earth (SHAPE):

- The planets which are many light years away from us, can't be seen easily in a telescope. But yes, we can surely study the light coming from those planets. The light we see is called the visible spectrum. But aside from that light there are different types of rays. When these rays interact with an object, then some rays get absorbed and some rays don't. On this basis, we will first study how light rays coming from Earth appear. And in the future, we will try to study where the light rays similar to Earth are coming from. In simple language, this is the job of SHAPE.

LANDER PAYLOADS:

1. Instrument for Lunar Seismic Activity (ILSA):

- Its objective is determining the structure of the lunar crust and mantle and measuring seismic activity around the landing site.

2.Radio Anatomy of Moon Bound Hypersensitive ionosphere and Atmosphere (RAMBHA):

- To measure the near surface plasma (ions and electrons) density and its changes with time.

3. Chandra's Surface Thermo physical Experiment (ChaSTE):

- To carry out the measurements of thermal properties of lunar surface near polar region.
- This ChaSTE device will make a small hole on the surface of the Moon. Then the land in and around it,will be heated and then how heat impacts the moon will be studied. This heat has a lot of impact on another element. And that is water.

4. LASER Retroreflector Array (LRA):

- It is a passive experiment to understand the dynamics of Moon system.
- This instrument is from NASA so LRA is a mirror which with the help of laser, which can accurately measure the distance between the moon and the Earth. This will help in making better calculations for future missions.

ROVER PAYLOADS:

1.Alpha Particle X-ray Spectrometer (APXS):

- To determine the elemental composition (Mg, Al, Si, K, Ca,Ti, Fe) of Lunar soil and rocks around the lunar landing site.
- This will study the soil there and most importantly, what are the elements in the soil this will be found out. This device will have a radioactive element called Curium. This will blast alpha particles and x-rayon the surface of the Moon and will be studied later. Focus will be in finding traces of magnesium, aluminium and iron.

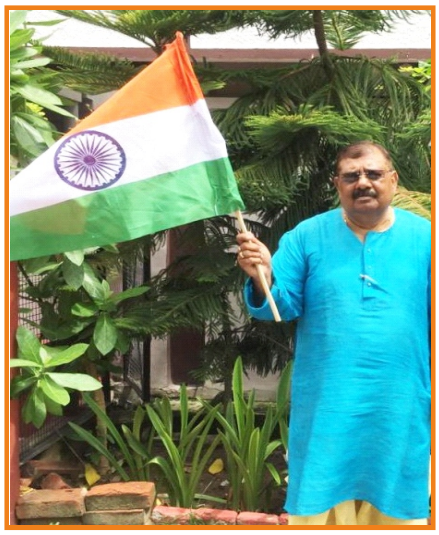
IMPACT OF CHAANDRAYAN -

- The first impact will be on our space capabilities. Soft landing is very difficult which before us has been done by only few countries. We have soft landing capabilities and we have now proved this. This is a matter of pride for us. This means in future human missions we will have a greater contribution.
- The second impact will be, helium- 3 mining. The energy sources of the earth are running out. We will need alternative energy. Using helium- 3 nuclear fusion can be a way to power Earth. This helium-3 is very rare on the Earth but is abundantly available on the moon. Not only India, China, Russia, and America are also trying to tap this energy.

Source: https://www.isro.gov.in/ISRO_EN/Chandrayaan3_New.html

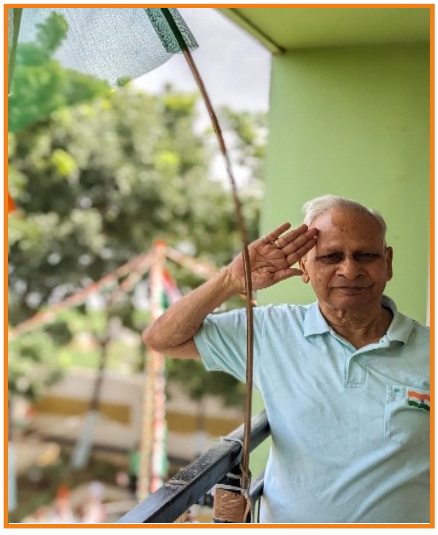
CSI Members of Lucknow Chapter celebrates Independence Day on 15 August 2023

Sh. Anil Srivastava



Sh. Arvind Sharma

Sh. Ashesh Agarwal



Sh. V.C. Rai

Dr. Rohitashwa Pandey

Dr. Shyam Kumar Garg

This Marker is the beginning of the Next Newsletter, rather than the end.