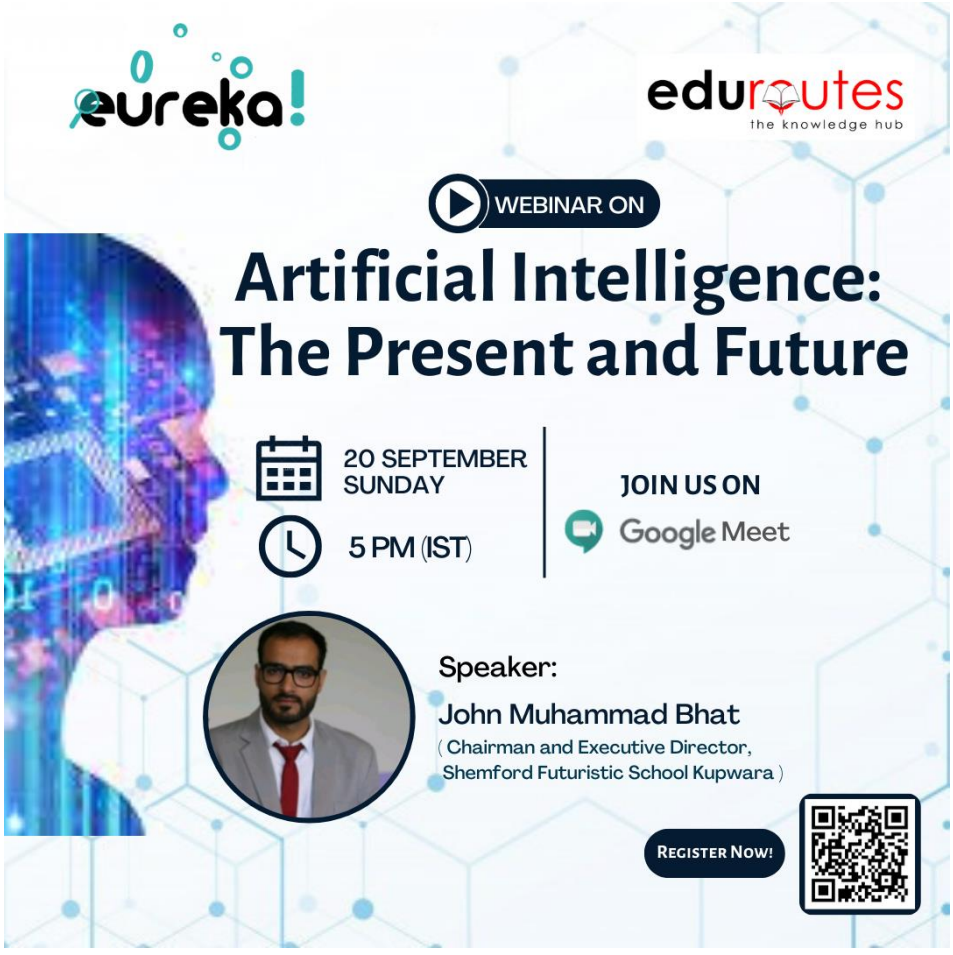
# ARTIFICIAL INTELLIGENCE: THE PRESENT AND FUTURE

A webinar on "ARTIFICIAL INTELLIGENCE: THE PRESENT AND FUTURE" was conducted on 20th September, 2020 (Sunday, 5-6 PM) under the societal activity of Eureka Prize Problems in collaboration with Eduroutes. The speaker for the webinar was JOHN MUHAMMAD BHAT, (Chairman and Executive Director, Shemford Futuristic School Kupwara). In this webinar, the participants learnt about

- The appropriate level of ambition when setting an AI strategy.
- What technologies are available and how companies are using them.
- How companies should think about ethics and ethics policies when implementing AI.
- How your organization can become “a more cognitive company”.



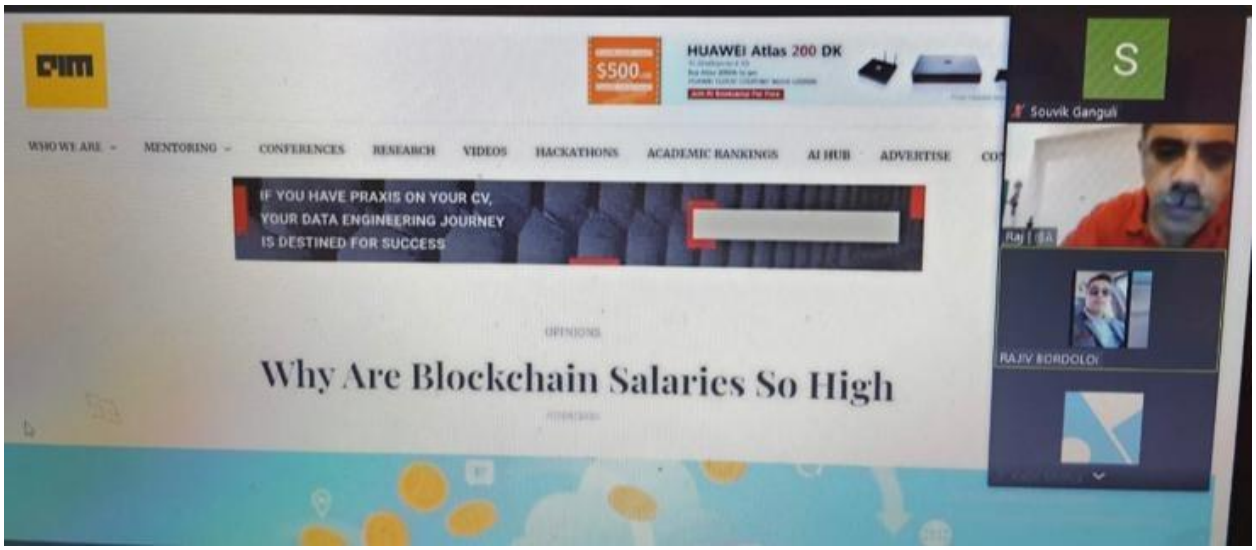
# Webinar on Blockchain Technology

A webinar with the theme on blockchain technology was conducted on 21 September, 2020 at 6.00PM. The speaker, Mr. Rajeev Kapoor highlighted the importance of blockchain technology and its applications in various industries.

The session started with the views of accomplished personalities like Blythe Masters who felt that blockchain is as significant now as internet was 25 years ago. William Mougayar's views regarding the concept were also presented where he felt like the entire concept of having information on the database would now be replaced by having information on blockchain. The prime minister's views were also included to further discuss the opportunities in this field.

Blockchain was then defined as a time stamped series of immutable records of data. Its ownership did not rely on a single entity. The blocks of data and their interconnection using cryptography were also presented. A few facts and figure were also presented to represent how the blockchain industry has expanded and will grow in the future.

The idea behind the development of blockchain was then introduced and details about network and peer to peer connection were discussed. The discussions revolved around that of a single ledger, shared and distributed data, as well as permanent and immutable information. The origin of blockchain was traced back to the financial crisis in the last decade. The origin of bitcoin and its effects were also included in the discussion. It was perceived that the fields of supply chain, internet of things, cloud computing, charities, voting, real estate and cyber security would be affected by it.

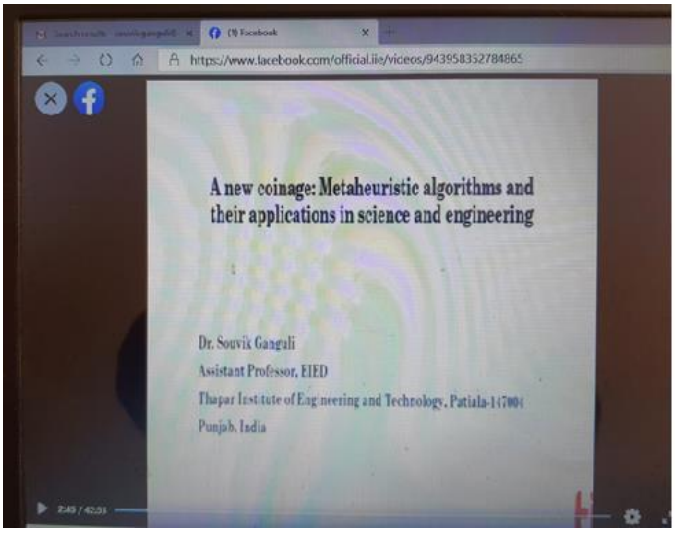



Possible transformations in the fields of retail, manufacturing, utilities, transportation, government and BFSI were also discussed. The webinar then proceeded onto a discussion regarding the job opportunities in the blockchain sector and revealed that the salaries offered were good even at the beginning stage. The growing demand for blockchain developers was discussed in terms of the Indian industries. Details of the companies willing to hire developers and the ones that worked on the technology were also mentioned.

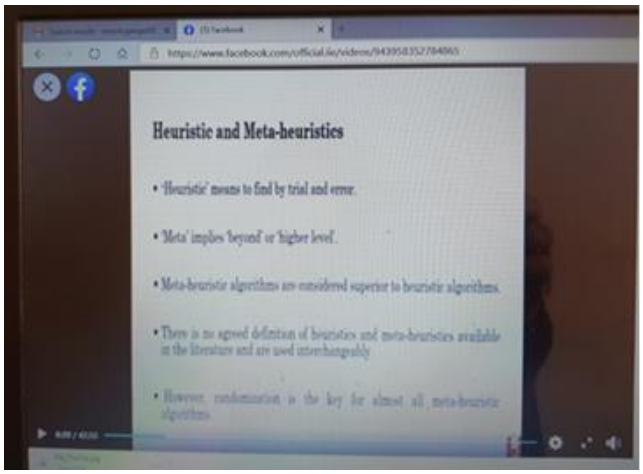
The session ended with a vote of thanks from the speaker. Many interesting questions were also raised from the participants that made the seminar interactive and productive.

# A new coinage: metaheuristic algorithms and their applications in science and engineering

A webinar on "A New Coinage: Metaheuristic Algorithms and their Applications in Science and Engineering" was conducted on 23rd September, 2020 (Wednesday, 8.30-9.30 PM) under the societal activity of Eureka Prize Problems in collaboration with Institute of IT Experts (IIE) and IEEE Lahore Section, Women in Engineering.

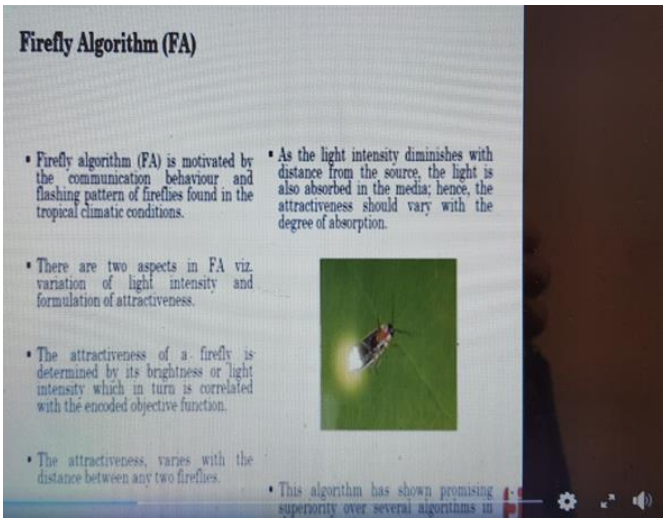



Metaheuristic algorithms have emerged as powerful tools in diverse science and engineering applications these days. The term meta- implies ‘beyond’ or ‘higher level’. They are far superior to ordinary heuristics.

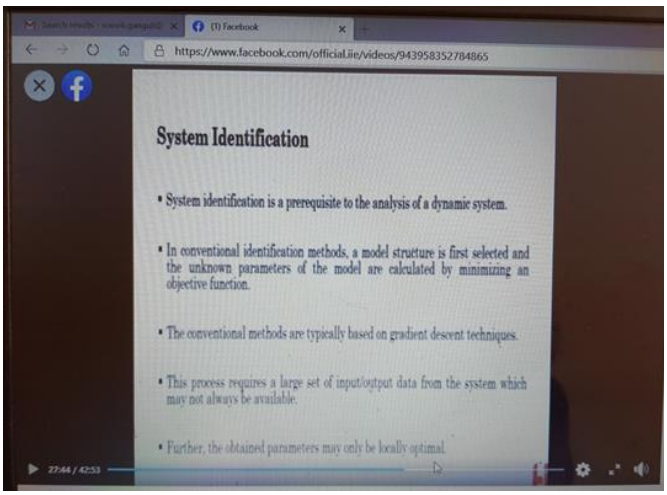



The variety of solutions obtained using metaheuristics is often accomplished with the help of randomization. Though metaheuristic algorithms are widely popular, still there is no clear-cut

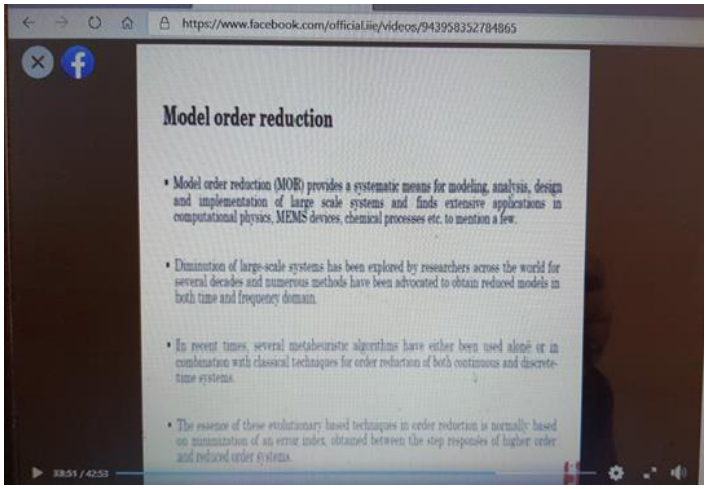
definition of heuristics and metaheuristics available in the literature. Several researchers even use them almost interchangeably.



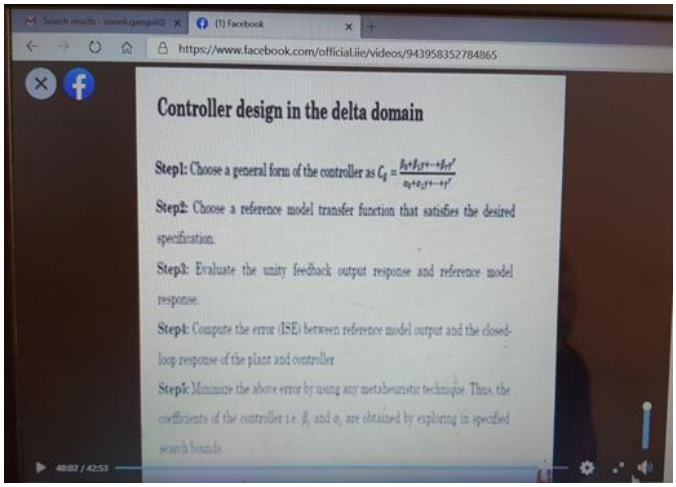

However, the general trend aims to label all stochastic algorithms via randomization and global exploration as metaheuristic. Randomization contributes valuably to move away from local to a global search. Thus, almost all metaheuristic algorithms are highly suitable for nonlinear modelling and control. Metaheuristic algorithms provide an efficient means to yield acceptable solutions by trial and error to a complex problem in a reasonably good time.




The aim of these algorithms is not to find every possible solution in the search space but to find a feasible solution within an acceptable time limit. However, there is no guarantee that the best solutions can be obtained. There are two major components of any metaheuristic algorithms namely exploration (diversification) and exploitation (intensification).




Exploration generates diverse solutions to utilize the entire search space, while exploitation focuses on the search in a local region by exercising the information that a current good solution is found in this region. A good balance of these two will ensure the attainment of a global solution.

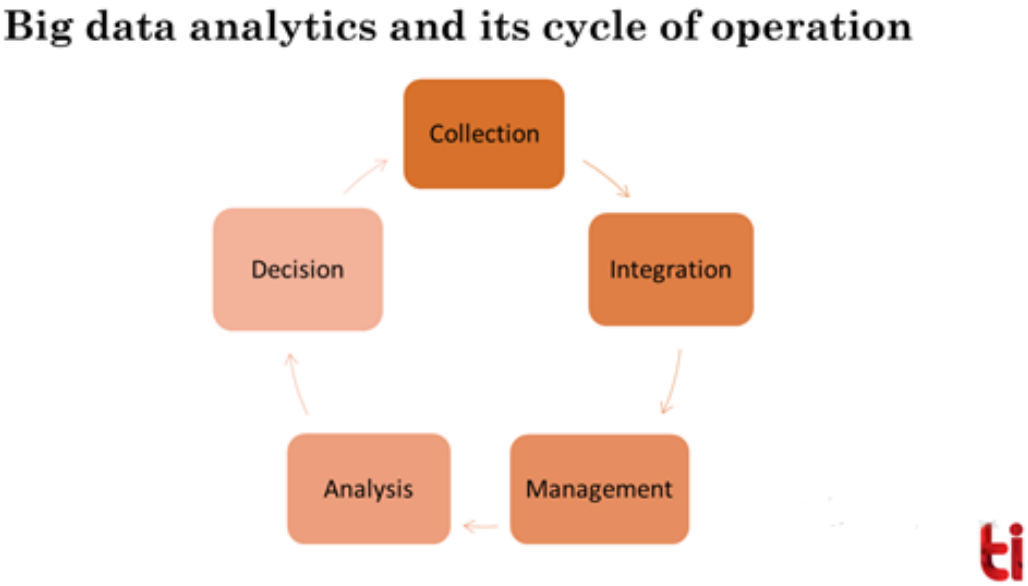



A revisit to the origin of the metaheuristic algorithms and their chronological developments are taken up. Some recently developed metaheuristic algorithms available in the literature are also be deliberated upon. Moreover, several engineering applications are addressed too. Finally, few future directions in this domain are also pointed out to keep the research on metaheuristics rolling.

## Webinar report on “Big Data Handling in Healthcare Application”

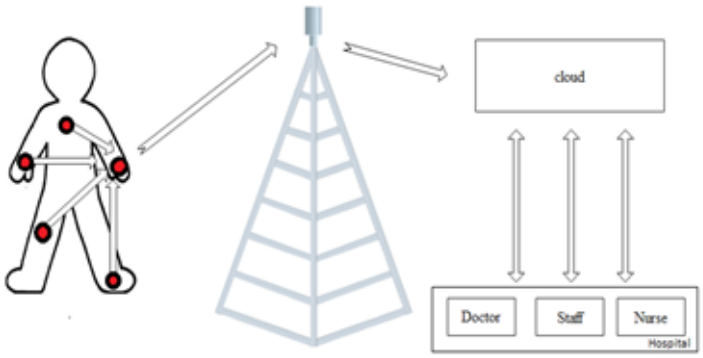
A webinar was organized by Eureka Prize Problems in association with Eduroutes, a start-up organization in Chandigarh. The event was held on 8th November, 2020. Dr. Souvik Ganguli, Assistant Professor, EIED, Thapar Institute of Engineering and Technology, Patiala presented on the topic “Big Data Handling in Healthcare Application”.

Over the last decades, there has been growing enthusiasm for the potential usefulness of these massive quantities of data, called Big Data, in transforming personal care, clinical care, and public health.



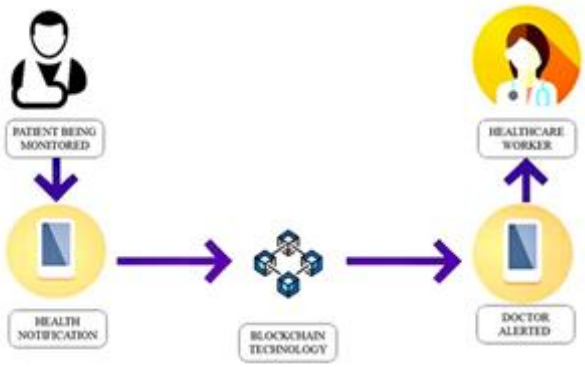

Initially, the healthcare industry abstained from using Big Data. The main reason behind this hesitance was the resistance to change, as the healthcare providers diagnosed and provided treatment using their clinical judgment.

## A IoT based healthcare system



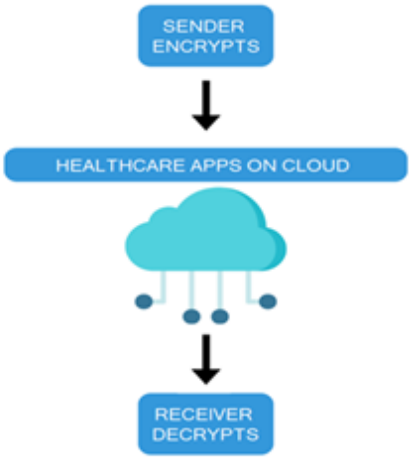

But nowadays, with the eruption of Big Data and its applications, the healthcare industry has got slanted towards better medical practice through analysis of data concerning their patients.

## Blockchain process for data security




It's quite evident from its applications that Big Data has left its undeniable imprints in the healthcare sector as well. The origin of Big Data in this industry will lead to a better healthcare system that hugely profits everyone involved in it, leading to a better life and better career opportunities as well.

**Cloud framework of big data for healthcare applications**




In this webinar, the participants learnt

- The potential benefits of Big Data for healthcare
- Big Data in public health
- Big Data-Based Healthcare Systems
- Ethical and legal issues for the effective use of Big Data in healthcare.

# Online Gaming Event

Thapar gaming platform (TGP) introduced under the guidance and mentorship of Eureka Prize Problems Society conducted its first-ever gaming event 'BUCKSHOT BLITZ' on 15th and 16th November 2020. The event had two major tournaments as follows:

- C.O.D-M: Mobile game
- VALORANT: PC Game

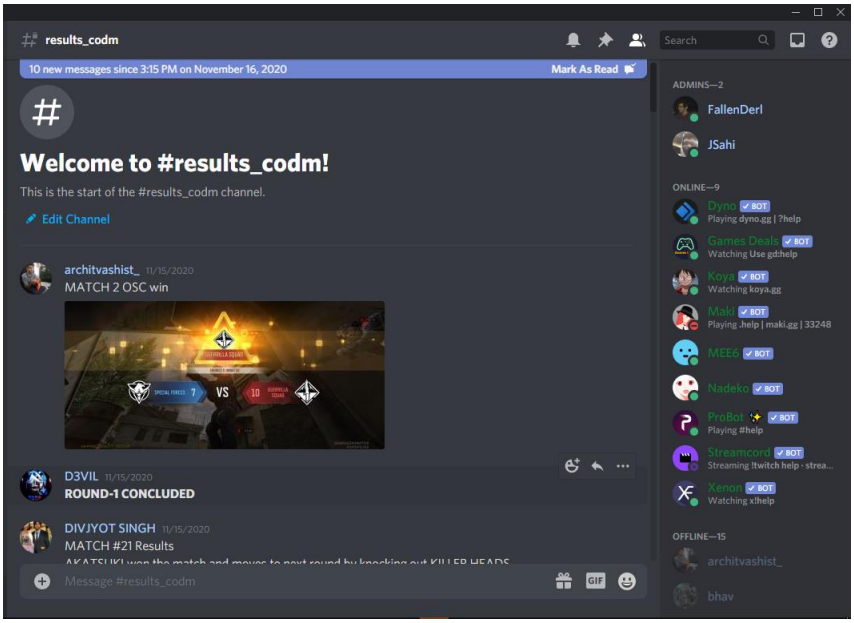
Students had to registers in squads (teams of 5 players) for both the games. The registration was live since 31st October till 8th November until which we had 43 teams registered for the event **(215 students).** Thereafter the prelims of both the games were held on 15th Nov (Sunday) while the final playoffs were scheduled and live streamed on YouTube on 16th Nov 2020.

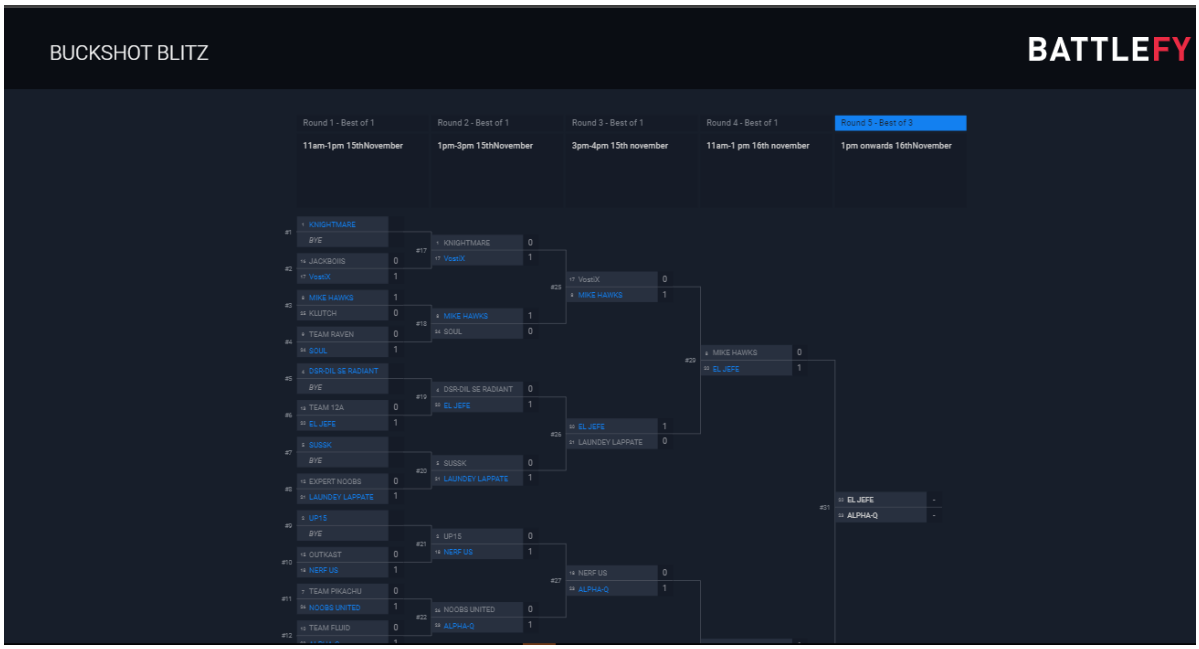
The gaming tournament required moderators to ensure smooth and a fair game match and hence a 'Discord Server' was made to establish a form of communication between the moderators and the participants. Discord is an application that allows anonymous people to come together and play/host/stream online gaming. Channels were made accordingly on the server and the match schedule was released three days prior to the event. During the event, players and moderators had the option of voice chat in case of any issue. All the match results were being simultaneously uploaded on the results tab to keep everyone updated.

A proper order of events and protocols was established amongst the moderators so as to minimize the possibility of any unfairness.

The moderators were as follows: Bhavya Khandelwal (101903080),Sarthak Babbar (101903620),Divesh Aggarwal(101903610),Divjyot Singh (10903623),Archit Vasisht (101917119),Dhairya Sethi (101905122)

DISCORD SERVER LINK: *https://discord.gg/vChw2EfS*






The winners of the games are:

<u>Valorant :</u>

Team name: EL JEFE

Team captain: Prabhdeep Singh

Enrollment number: 101816014

<u>COD-M:</u>

Team name: TEAM QAATIL

Team captain: Prerit Agrawal

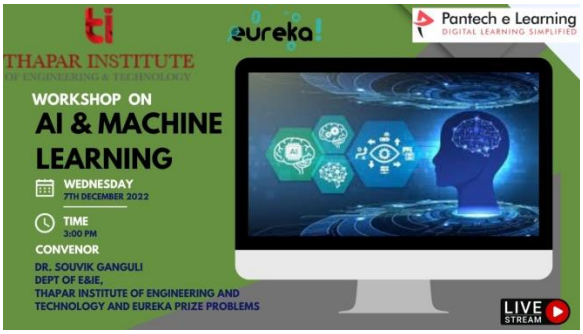
Thapar registration number: 175360 (1st year)

Apart from the event there were other students in the organizing committee of this event and included publicity of the event, and managing the backend of the entire tournament. They were: Sudhanyu Dimri (101901016), Neilohit Dumka (101903022),Sahil Chugh (101903061),Vijender Singh (101908195).

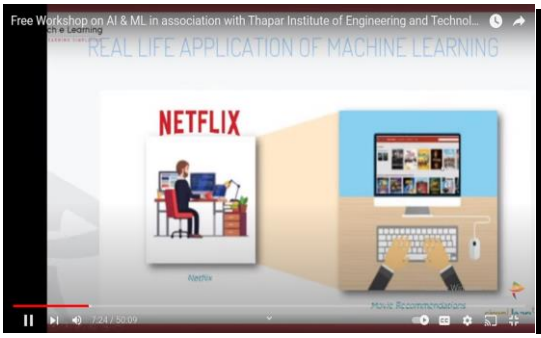
**Workshop on AI and ML (7th Dec, 2022)**

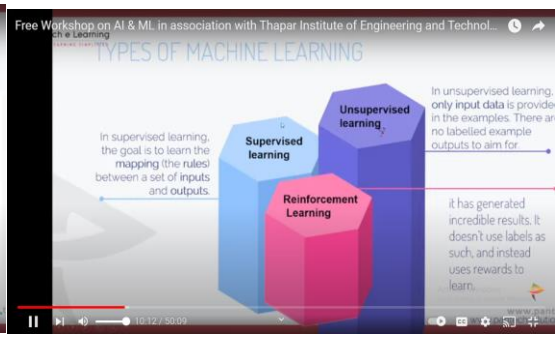
AI (Artificial Intelligence) and ML (Machine Learning) are transformative technologies that have gained significant attention and practical applications in recent years. AI refers to the development of computer systems capable of performing tasks that typically require human intelligence, such as problem-solving, decision-making, and natural language processing. ML, a subset of AI, involves training algorithms to learn from data and improve their performance over time without explicit programming. These technologies have revolutionized various industries, including healthcare, finance, transportation, and entertainment. They enable intelligent automation, predictive analytics, personalized recommendations, and more. With ongoing advancements, AI and ML have the potential to drive innovation, enhance productivity, and shape the future of society in remarkable ways. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on AI and ML on 7th Dec, 2022 in association with Pantech e Learning. The program link is shared for reference:

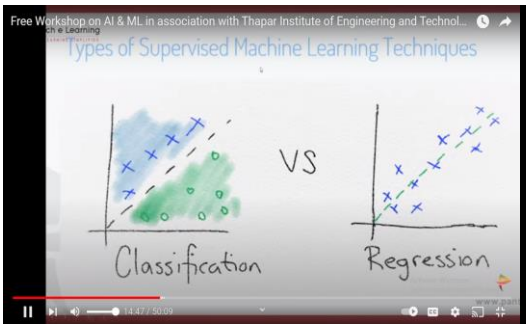
https://www.youtube.com/live/3W7oP9_KzcE?feature=share.

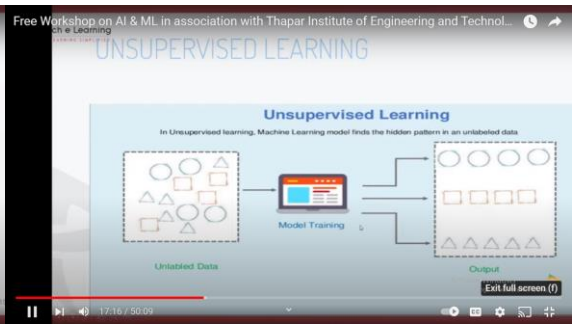


Free Workshop on AI & ML in association with Thapar Institute of Engineering and Technology



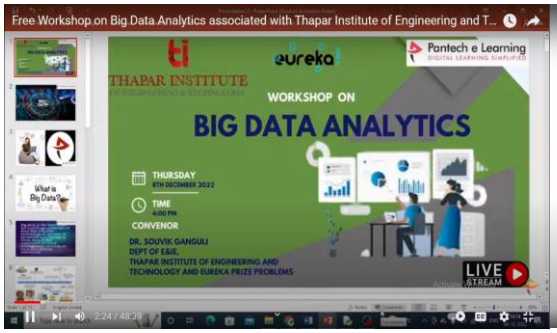



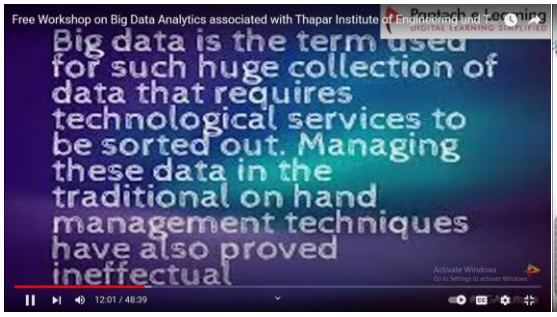



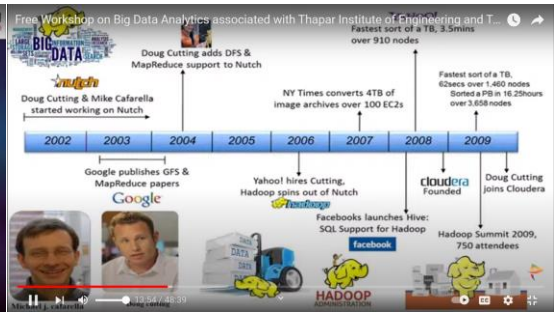
**Workshop on Big Data Analytics (8th Dec, 2022)**

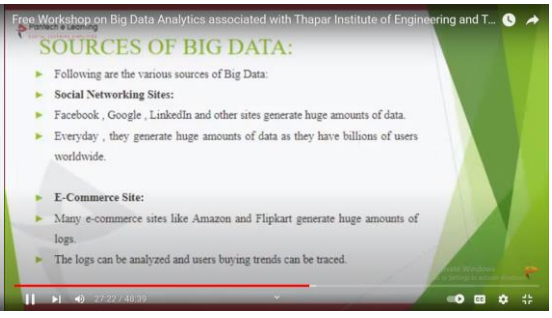
Big Data Analytics refers to the process of extracting valuable insights and patterns from large and complex datasets. It involves collecting, organizing, and analyzing vast amounts of data to uncover hidden patterns, trends, and correlations. By leveraging advanced algorithms and technologies, organizations can gain actionable intelligence that can drive decision-making, optimize operations, and uncover new opportunities. Big Data Analytics enables businesses to understand customer behaviour, enhance marketing strategies, improve operational efficiency, and mitigate risks. It has applications across various industries, including finance, healthcare, retail, and manufacturing. With the exponential growth of data, Big Data Analytics plays a crucial role in unlocking the potential of data and driving innovation in the digital era. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on Big Data Analytics on 8th Dec, 2022 in association with Pantech e Learning. The program link is given as

https://www.youtube.com/live/gr6ZlA3LEOw?feature=share





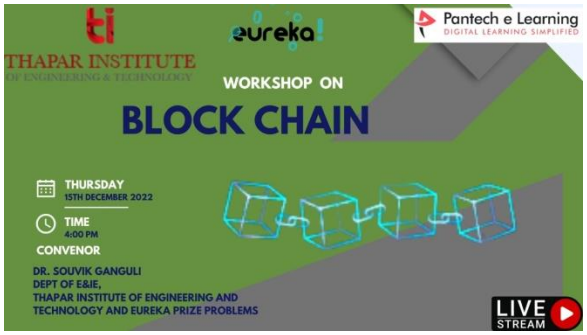



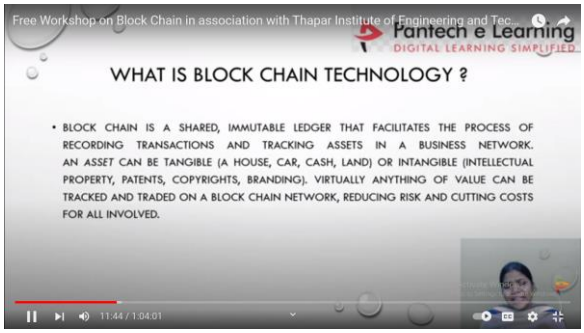


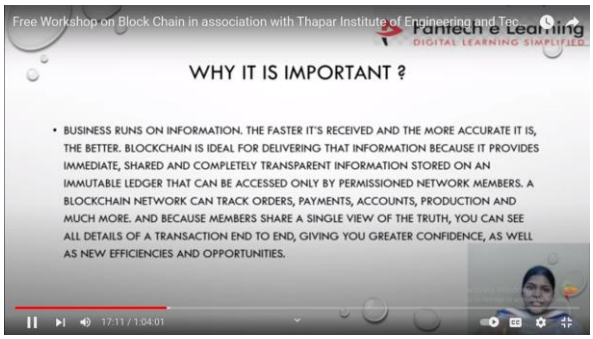
## Workshop on Blockchain (15th Dec, 2022)

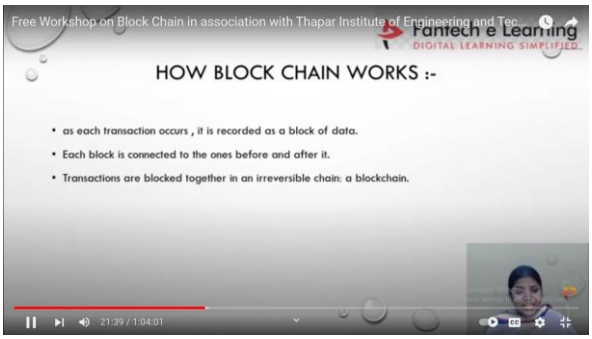
Blockchain is a decentralized and immutable digital ledger technology that enables secure and transparent recording of transactions across multiple parties. It operates on a network of computers, ensuring that no single entity has complete control over the data. Each transaction, or "block," is linked to previous blocks in a chronological and encrypted manner, forming a "chain." Blockchain offers numerous benefits, including enhanced security, transparency, and immutability, making it ideal for applications like cryptocurrency, supply chain management, voting systems, and smart contracts. By eliminating the need for intermediaries and enabling trustless transactions, blockchain has the potential to revolutionize various industries and redefine how we store, share, and verify information. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on Blockchain on 15th Dec, 2022 in association with Pantech e Learning. The program link is shared for reference:

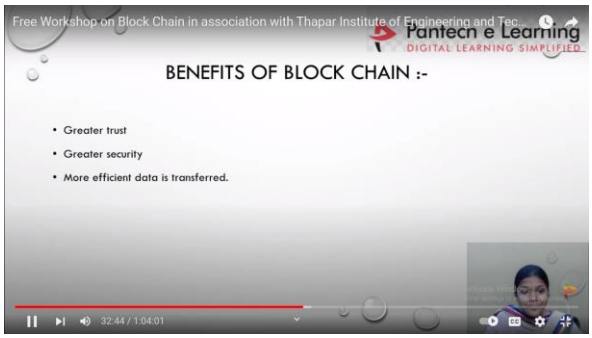
https://www.youtube.com/watch?v=j9b1SMW3rmU&t=231s

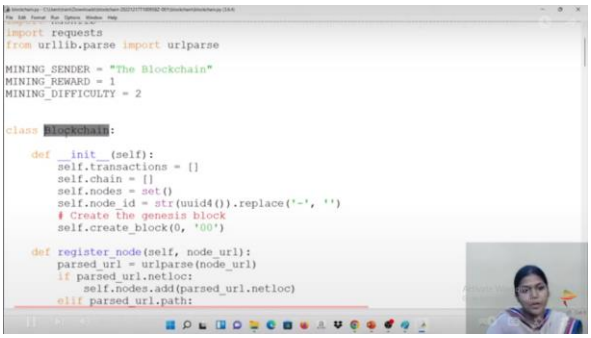


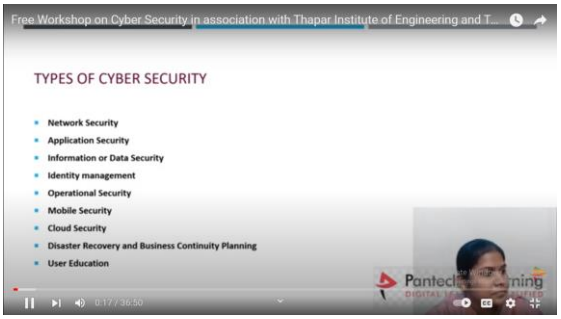



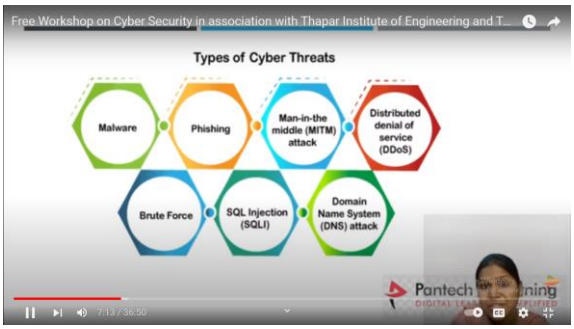



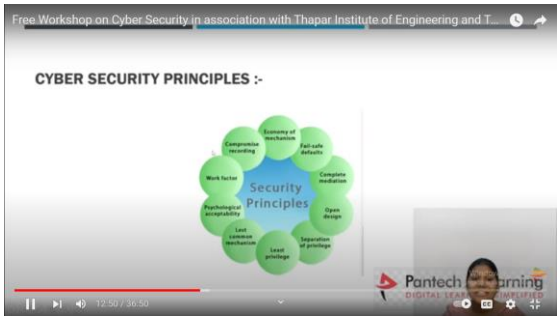
## Workshop on Cyber Security (16th Dec, 2022)

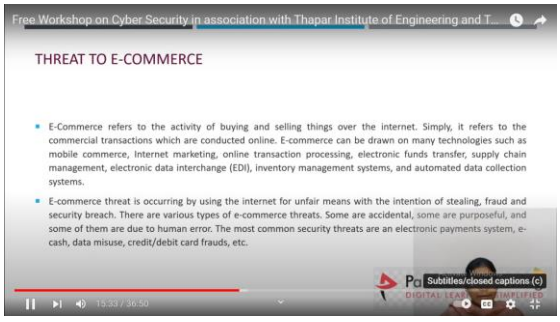
Cyber security refers to the practice of protecting computer systems, networks, and data from unauthorized access, theft, and damage. With the increasing reliance on digital technologies, cybersecurity has become a critical concern. It involves implementing measures to prevent, detect, and respond to cyber threats, such as malware, phishing attacks, data breaches, and ransomware. Effective cyber security strategies include robust firewalls, encryption, authentication protocols, intrusion detection systems, and employee awareness and training. Organizations and individuals must prioritize cyber security to safeguard sensitive information, maintain privacy, and ensure the integrity of digital assets. As cyber threats continue to evolve, cyber security remains an on-going challenge that requires constant vigilance and proactive measures. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on Cyber Security on 16th Dec, 2022 in association with Pantech e Learning. The program link is shared for reference:

https://www.youtube.com/watch?v=6lHXZZCvFT4&t=274s





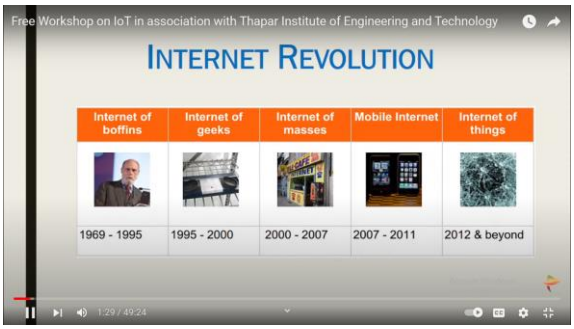



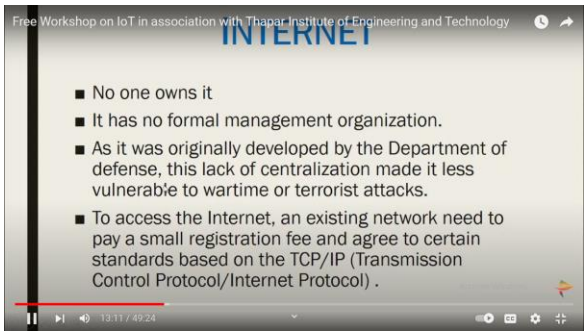



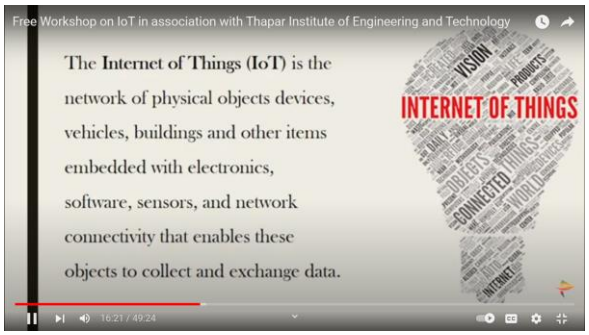
**Workshop on IoT (21st Dec, 2022)**

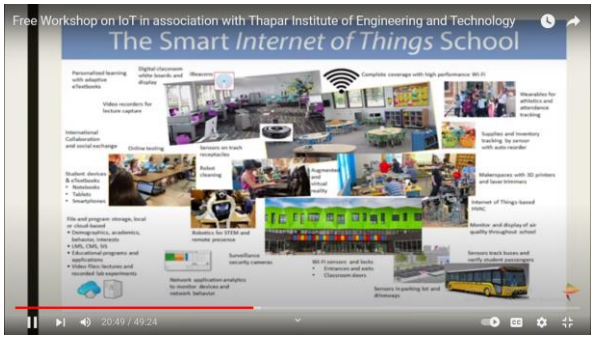
The Internet of Things (IoT) refers to the interconnected network of physical devices embedded with sensors, software, and connectivity that enables them to exchange data and communicate with each other. These devices can include everyday objects like appliances, vehicles, and wearable devices. IoT technology allows for seamless integration of the digital and physical worlds, enabling automation, remote monitoring, and data-driven decision-making. IoT applications are diverse, spanning across industries such as healthcare, agriculture, transportation, and smart cities. By enabling efficient data collection and analysis, IoT has the potential to enhance productivity, optimize resource utilization, and improve quality of life. However, security and privacy concerns remain crucial considerations in the widespread adoption of IoT. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on IoT on 21st Dec, 2022 in association with Pantech e Learning. The program link is shared for reference:

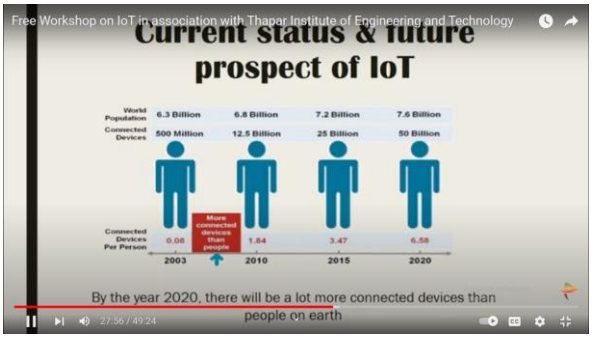
https://www.youtube.com/watch?v=6mauFUPh5aM



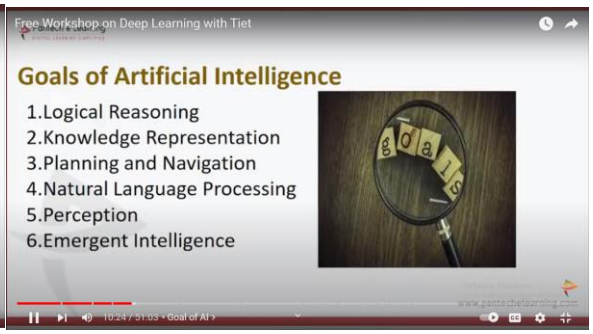



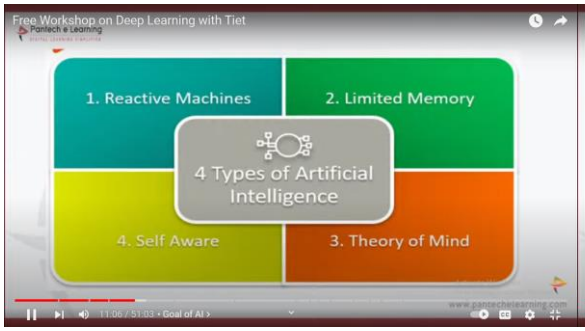



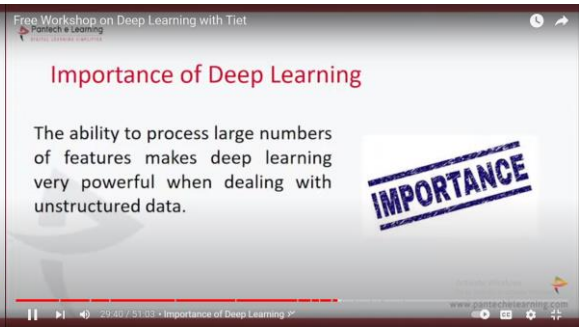
**Workshop on Deep Learning (28th Dec, 2022)**

Deep learning techniques are a subset of machine learning that aim to replicate the workings of the human brain through artificial neural networks. These networks consist of multiple layers of interconnected nodes, or neurons, which process and learn from vast amounts of data. Deep learning models excel at tasks such as image and speech recognition, natural language processing, and pattern recognition. They achieve remarkable accuracy by automatically extracting relevant features from raw data, without the need for explicit feature engineering. Deep learning techniques, powered by advancements in computational power and data availability, have revolutionized fields like computer vision, autonomous driving, and medical diagnostics, driving innovation and pushing the boundaries of AI. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on Deep Learning on 28th Dec, 2022 in association with Pantech e Learning. The program link is provided for reference.

https://www.youtube.com/live/31GgSU-WdEc?feature=share



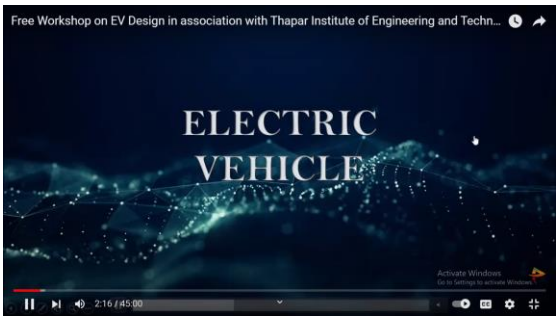



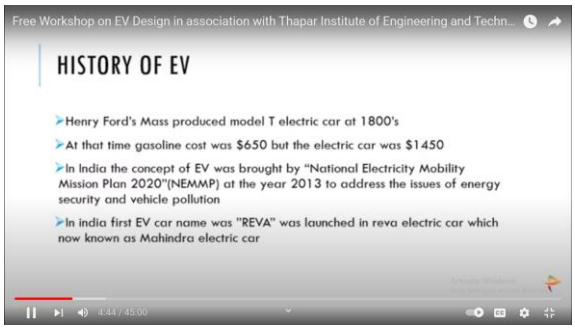



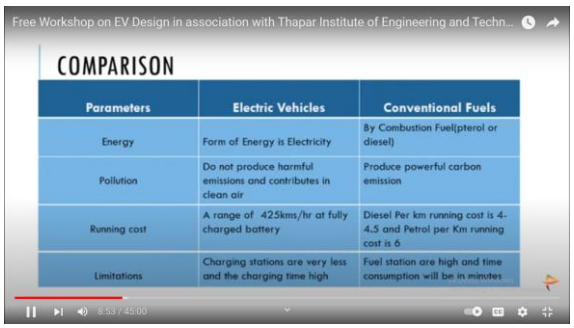
## Workshop on EV Design (29th Dec, 2022)

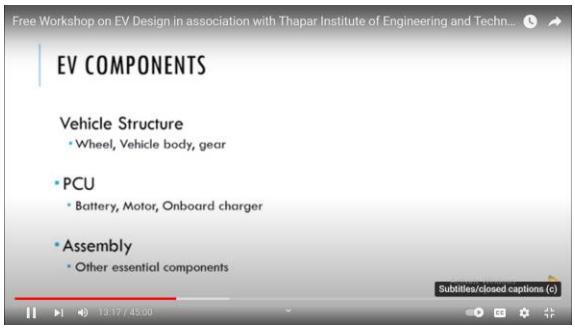
Electric vehicle (EV) design involves creating vehicles powered by electric motors and rechargeable batteries, replacing traditional internal combustion engines. EVs are designed with a focus on energy efficiency, aerodynamics, and optimal battery placement. Streamlined bodies, lightweight materials, and regenerative braking systems are utilized to maximize range and improve efficiency. Interior designs cater to the unique characteristics of EVs, with attention to battery placement and charging infrastructure integration. EV design also emphasizes user experience, with intuitive interfaces and advanced connectivity features. As the demand for sustainable transportation grows, EV design plays a vital role in creating attractive, eco-friendly vehicles that meet the needs of modern consumers. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the online workshop on EV Design on 29th Dec, 2022 in association with Pantech e Learning. The program link is provided below:

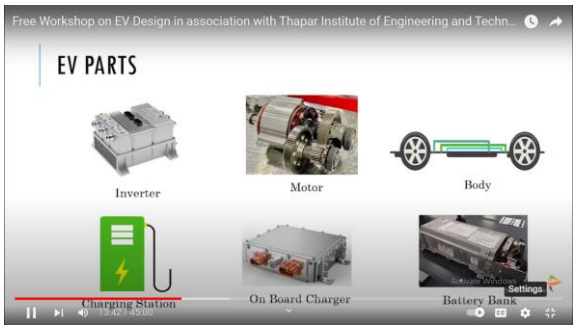
https://www.youtube.com/live/I_TU2TwoxFU?feature=share



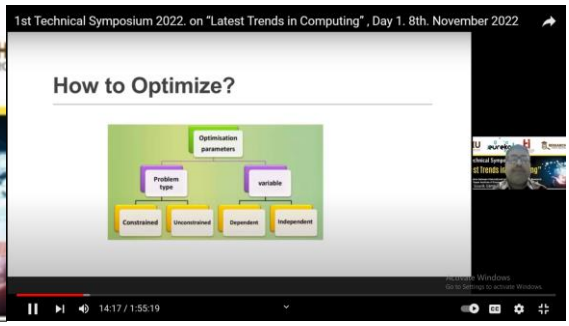



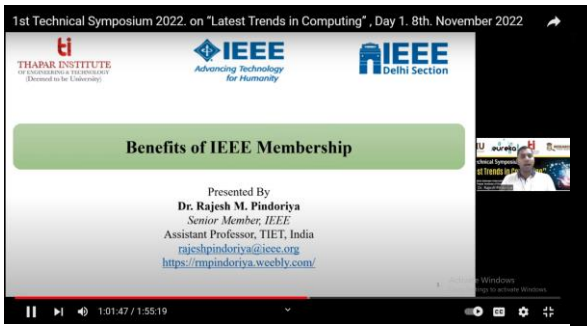
**Technical Symposium on Latest Trends in Computing (8-9th Nov, 2022)**

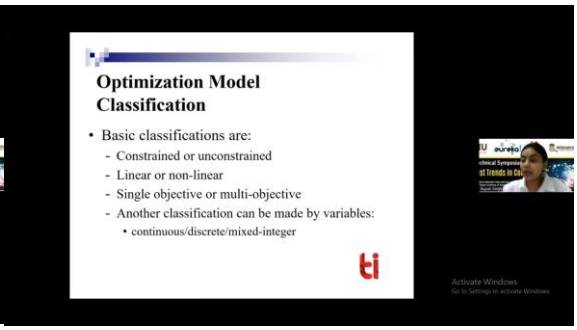
Computing is an ever-evolving field that encompasses a wide range of technologies and practices. It involves the study, development, and application of computer systems and software to solve problems, process information, and enhance human capabilities. Recent trends in computing include artificial intelligence, edge computing, quantum computing, the Internet of Things, cloud computing, cyber security, augmented reality, virtual reality, and block chain. These trends are shaping the future of technology, revolutionizing industries, and transforming the way we live, work, and interact. Computing continues to push boundaries, enabling innovation, automation, and advancements in various domains for a connected and data-driven world. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the Technical Symposium on Latest Trends in Computing on 8-9th Nov, 2022 in association with IIU Research Centre. The link for the program is shared for reference.

Day 1 Link: https://youtu.be/pVT65s8Swlo

Day 2 Link: https://www.youtube.com/watch?v=A0pPXVrgNqk&t=5556s





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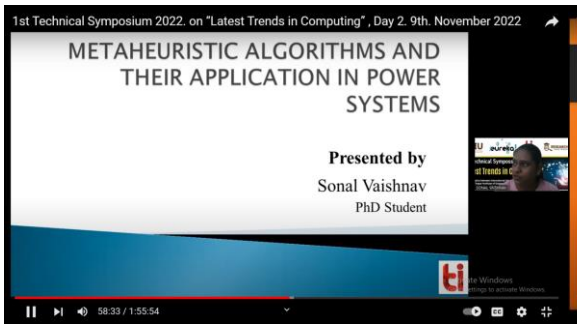
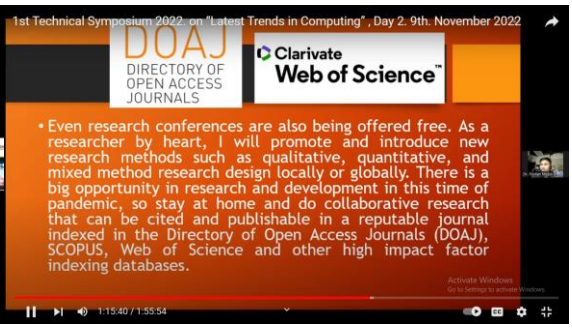
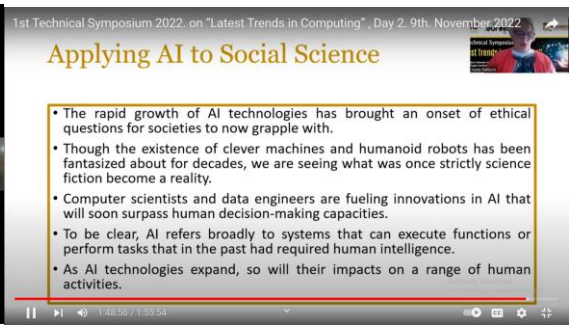
RESEARCH CENTRE
GALGOTIAS
IOT
Unleashing emerging research trends advancements in IoT
Arun Kumar Rana
Assistant Professor 3
CSE Department (NBA)
Galgotias College of Engineering & Technology

1st Technical Symposium 2022. on "Latest Trends in Computing" , Day 2. 9th. November 2022
Scroll for details
33:54 / 1:55:54


1st Technical Symposium 2022. on "Latest Trends in Computing" , Day 2. 9th. November 2022
METAHEURISTIC ALGORITHMS AND THEIR APPLICATION IN POWER SYSTEMS
Presented by
Sonal Vaishnav
PhD Student
58:33 / 1:55:54


1st Technical Symposium 2022. on "Latest Trends in Computing" , Day 2. 9th. November 2022
DOAJ
DIRECTORY OF OPEN ACCESS JOURNALS
Clarivate
Web of Science
• Even research conferences are also being offered free. As a researcher by heart, I will promote and introduce new research methods such as qualitative, quantitative, and mixed method research design locally or globally. There is a big opportunity in research and development in this time of pandemic, so stay at home and do collaborative research that can be cited and publishable in a reputable journal indexed in the Directory of Open Access Journals (DOAJ), SCOPUS, Web of Science and other high impact factor indexing databases.
1:15:40 / 1:55:54

1st Technical Symposium 2022. on "Latest Trends in Computing" , Day 2. 9th. November 2022
LINGAYA'S UNIVERSITY
choose to know
GOAL ORIENTATION
1:29:20 / 1:55:54


1st Technical Symposium 2022. on "Latest Trends in Computing" , Day 2. 9th. November 2022
Applying AI to Social Science
• The rapid growth of AI technologies has brought an onset of ethical questions for societies to now grapple with.
• Though the existence of clever machines and humanoid robots has been fantasized about for decades, we are seeing what was once strictly science fiction become a reality.
• Computer scientists and data engineers are fueling innovations in AI that will soon surpass human decision-making capacities.
• To be clear, AI refers broadly to systems that can execute functions or perform tasks that in the past had required human intelligence.
• As AI technologies expand, so will their impacts on a range of human activities.
1:48:56 / 1:55:54

**Technical Symposium on Futuristic Technologies (2-3rd Dec, 2022)**

Futuristic technologies encompass a range of cutting-edge advancements that have the potential to revolutionize various aspects of human life. These technologies often integrate artificial intelligence (AI), robotics, nanotechnology, and biotechnology. AI-driven automation and machine learning are transforming industries by optimizing processes and decision-making. Robotics is advancing with the development of autonomous vehicles, drones, and humanoid robots. Nanotechnology enables the manipulation of matter at the atomic and molecular level, leading to breakthroughs in medicine, energy, and materials science. Biotechnology is advancing gene editing, personalized medicine, and bio-inspired innovations. Smart Grid is another important thrust area that has been explored in the workshop. Together, these futuristic technologies hold immense promise for creating a more efficient, sustainable, and interconnected future. The Eureka Prize Problems society, under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar organized the Technical Symposium on Futuristic Technologies on 2-3rd Dec, 2022 in association with Eduroutes, Chandigarh.

**Technical Symposium on Future Research Trends (9th-13th Jan, 2023)**

Future research trends encompass a wide array of disciplines, each driven by evolving technologies, societal needs, and scientific advancements. A concise overview of some key areas are provided here:

**Artificial Intelligence (AI) and Machine Learning (ML):** Continued exploration of AI and ML applications, including deep learning, natural language processing, and reinforcement learning, will shape industries like healthcare, finance, and autonomous systems.

**Renewable Energy and Sustainability:** Research into sustainable energy sources, energy storage, and environmental conservation remains critical. Technologies like advanced solar panels, energy-efficient materials, and grid innovations are focal points.

**Quantum Computing:** Quantum computing promises unprecedented computational power. Researchers are exploring applications in cryptography, optimization problems, and drug discovery, although practical implementations are still in the early stages.

**Neuroscience and Brain-Computer Interfaces:** Understanding the intricacies of the brain and developing brain-computer interfaces are burgeoning fields. This research has implications for healthcare, communication technology, and the treatment of neurological disorders.

**Cyber security and Privacy**: With the increasing digitization of society, research in cyber security is essential. This includes developing robust encryption methods, secure communication protocols, and safeguarding against emerging cyber threats.

**3D Printing and Advanced Manufacturing:** Innovations in 3D printing materials and techniques have broad applications in manufacturing, healthcare, and aerospace. This includes bio-printing of organs, custom manufacturing, and rapid prototyping.

**Human Augmentation and Wearable Technologies:** Research in enhancing human capabilities through technologies like exoskeletons, smart prosthetics, and brain-machine interfaces continues to progress, aiming to improve quality of life and performance.

It is essential to note that the interdisciplinary nature of many research trends often leads to collaborative efforts, driving innovation at the intersection of various fields. As technology evolves, these trends are likely to shape the future landscape, addressing global challenges and opening new frontiers of knowledge. A five day (9-13th Jan, 2023) Technical Symposium on Future Research Trends was organized by Eureka Prize Problems society in association with Eduroutes, Chandigarh under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar. The program is detailed below.

edurutes eureka! THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY (Deemed to be University)

TECHNICAL SYMPOSIUM
ON **FUTURE**
**RESEARCH TRENDS**

**DR. AMIT KUMAR**

Talk Title : Power Converter Control

**PROF. ARUN KUMAR RANA**

Talk Title : Unleashing Emerging Research trends and advancements in IoT

LIVE WEBINAR | DAY 01 | JAN 09 | 05:00 PM to 06:00 PM

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TECHNICAL SYMPOSIUM
ON **FUTURE**
**RESEARCH TRENDS**

**DR. NIRAV KARELIA**

Talk Title: Introduction to smart grid and way forward

**DR. JITENDER KAUSHAL**

Talk title: Facility of distribution networks for EV charging infrastructure along the national-highway

LIVE WEBINAR | DAY 02 | JAN 10 | 05:00 PM to 06:00 PM

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TECHNICAL SYMPOSIUM
ON **FUTURE**
**RESEARCH TRENDS**

**DR. TAMAL ROY**

Talk Title: Linear Fractional Transformation Modelling

**DR. VIPIN CHANDRA PAL**

Talk title: Introduction to Time-Delay Systems

LIVE WEBINAR | DAY 03 | JAN 11 | 05:00 PM to 06:00 PM

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TECHNICAL SYMPOSIUM
ON **FUTURE**
**RESEARCH TRENDS**

**DR. SOUVIK GANGULI**

Talk Title: A Unified Approach to System and Control

LIVE WEBINAR | DAY 04 | JAN 12 | 05:00 PM to 05:30 PM

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TECHNICAL SYMPOSIUM
ON **FUTURE**
**RESEARCH TRENDS**

**DR. TAPSI NAGPAL**

Talk Title: Multi-Disciplinary Research

**PROF. VIVEK ARYA**

Talk Title: Intellectual Property Rights

LIVE WEBINAR | DAY 05 | JAN 13 | 05:00 PM to 06:00 PM

**Technical Symposium on Intellectual Property Rights (8th-12th May, 2023)**

Intellectual Property Rights (IPR) refer to legal protections granted to the creators or owners of intellectual property, which includes inventions, literary and artistic works, designs, symbols, names, and images used in commerce. The primary objective of IPR is to encourage innovation and creativity by providing individuals or entities with exclusive rights to their creations. Here's a brief overview:

**Types of Intellectual Property:**

**Patents:** Grant exclusive rights to inventors for new and useful inventions, typically for a limited period.

**Copyrights:** Protect original literary, artistic, and musical works, giving creators exclusive rights to reproduce, distribute, and display their creations.

**Trademarks:** Safeguard symbols, names, and slogans used to identify and distinguish goods or services in the marketplace.

**Trade Secrets:** Protect confidential business information, providing a competitive advantage to the holder.

**Patents:**

**Inventions:** Patents are granted for novel and non-obvious inventions. They provide inventors with the exclusive right to make, use, and sell their inventions for a specified period, typically 20 years.

**Copyrights:**

**Creative Works:** Copyright protection applies to original works of authorship, such as books, music, art, and software. It grants creators exclusive rights to their works during their lifetime and a certain period thereafter.

**Trademarks:**

**Brand Protection:** Trademarks protect brands and their associated goodwill. They prevent others from using similar marks that may cause confusion in the marketplace.

**Trade Secrets:**

**Confidential Information:** Trade secrets encompass confidential business information, including formulas, processes, and methods. Unlike patents, trade secrets have no expiration date but require reasonable efforts to maintain secrecy.

**Enforcement and Infringement:**

**Legal Actions:** Owners of intellectual property can take legal action against individuals or entities that infringe on their rights. This may involve seeking damages, injunctions, or both.

**International Protection:**

**WIPO and TRIPS:** The World Intellectual Property Organization (WIPO) establishes international standards for intellectual property protection. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) sets minimum standards for IP regulation in international trade.

**Challenges and Controversies:**

**Balancing Interests:** There is an ongoing debate about finding a balance between protecting the rights of creators and fostering innovation while ensuring public access to knowledge and culture.

**Licensing and Commercialization:**

**Monetization:** Intellectual property owners often license their rights to others for commercial purposes, generating revenue and fostering innovation through collaboration.

Understanding and navigating the complexities of intellectual property rights are crucial for creators, innovators, and businesses to safeguard their ideas and creations in a competitive global landscape. While IPR encourages innovation, its implementation requires a delicate balance to avoid stifling creativity or impeding access to essential knowledge.

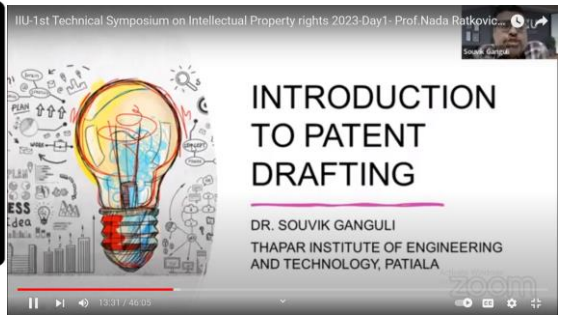
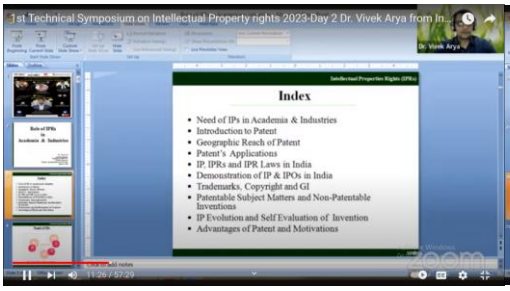
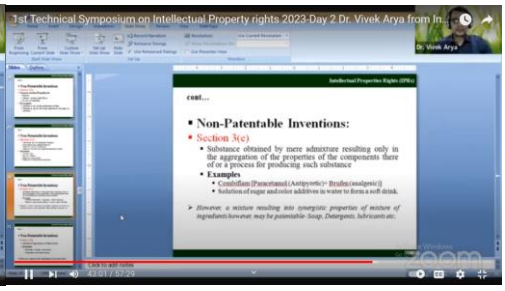
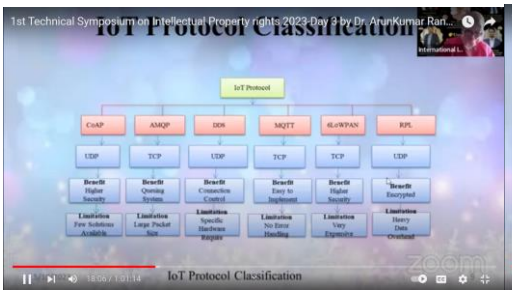
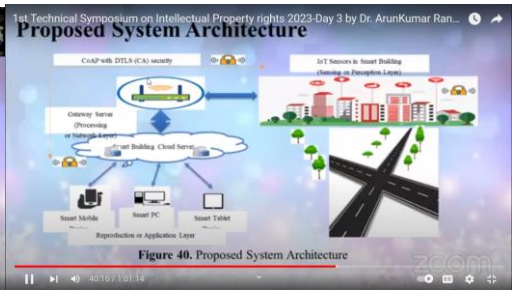
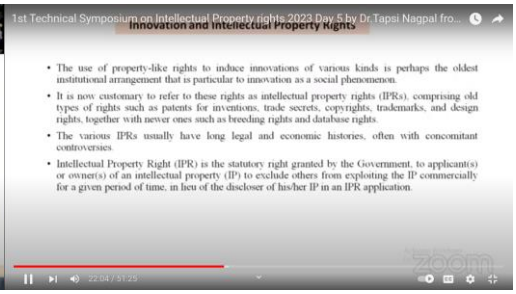
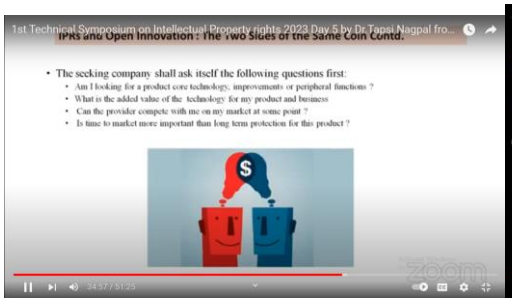
A week long (8-12$^{th}$ May, 2023) Technical Symposium on Intellectual Property Rights was organized by Eureka Prize Problems society in association with IIU Research Centre under the mentorship of Dr. Souvik Ganguli and Dr. Amit Kumar. The program links are provided below for reference.

Day 1 Link: https://www.youtube.com/watch?v=RmjmWUCYBwA

Day 2 Link: https://www.youtube.com/watch?v=D7GBxhXYzKM&t=2650s

Day 3 Link: https://www.youtube.com/watch?v=TejD_vgTD3k

Day 4 Link: https://www.youtube.com/watch?v=yGSsYVmEovg

Day 5 Link: https://www.youtube.com/watch?v=0_vbw1Kjk8E

IIU-1st Technical Symposium on Intellectual Property rights 2023-Day1-Prof.Nada Ratkovic,Cofounder