



AVIT
AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY



**VINAYAKA MISSION'S
RESEARCH FOUNDATION**
(Deemed to be University under section 3 of the UGC Act 1956)



AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY

DEPARTMENT OF BIOMEDICAL ENGINEERING & DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

PROGRAM REPORT for A 360 ° INTERPRETATION ON EMERGING TECHNOLOGIES

12th July 2024

AVIT- Department of Biomedical Engineering & Department of Electronics and Communication Engineering have organized an “**Expert Talk**” titled “**A 360° Interpretation on Emerging Technologies**” on **12th July 2024** at Digital Class Room

About the Event

The half a day session was handled by resource speaker “**Mr.S.Karan Barola**”, Head - Technical Services at Barola Technologies, an eminent personality in the field of emerging technologies. The session aimed to provide a comprehensive overview of the latest trends and advancements in technology and their implications for various industries. There are more than 40 participants/students from [ECE & BME] dept have participated in the event and the entire event was hosted and coordinated by **Mr.V.Prabhakaran, AP (G-II),BME.**

Objective of the Event

- To provide an in-depth understanding of emerging technologies.
- To explore the impact of these technologies on different sectors.
- To discuss the future prospects and challenges associated with emerging technologies.
- To inspire participants/students to leverage these technologies in their respective ideas.



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Event Brochure



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Cordially invites you all for the
Guest Lecture on

A 360° Interpretation on Emerging Technologies

Resource Person

Mr.S.Karan Barola

Head – Technical Services,
Barola Technologies



12.07.2024

10.30 AM to 12.00 PM



Digital Class Room



Organized by
Department of Biomedical Engineering
Department of Electronics and Communication

Start of the Event | 12th July 2024 | 10:30 am

The event was initiated with a warm welcome address by **“Dr.L.K.Hema, Professor and Head, ECE & BME - AVIT”**.



Welcome Address by Dr.L.K.Hema, Professor & Head – ECE &BME

The session was stated after a brief introduction about the guest speaker by **“Mr.Shyam Bihari, III-Year/BME”**.



Chief Guest Introduction by Mr.Shyam Bihari – III/BME



Key Highlights

Artificial Intelligence (AI) and Machine Learning

Mr. Barola discussed the widespread applications of AI and machine learning in industries such as healthcare, finance, and transportation. He highlighted how AI is automating processes, enhancing efficiency, and driving innovation. He stressed the importance of ethical AI development and the need for responsible AI usage to avoid biases and ensure fairness.

Internet of Things (IoT)

The session covered the concept of IoT and the idea of a connected world where smart devices communicate and collaborate. Examples of IoT applications included smart homes, smart cities, and industrial IoT, showcasing how IoT is transforming everyday life and business operations. Mr. Barola addressed the challenges of data security and privacy in IoT implementations.

Blockchain Technology

An introduction to blockchain technology and its decentralized nature was provided. Beyond cryptocurrencies, Mr. Barola explained blockchain's potential in supply chain management, voting systems, and more. He also touched on the scalability issues and regulatory challenges faced by blockchain technology.

5G Technology

The evolution of mobile networks leading to the advent of 5G was discussed. Mr. Barola elaborated on the benefits of 5G technology, including faster communication, improved automation, and the proliferation of IoT devices. He mentioned the infrastructure requirements for 5G deployment and addressed potential health concerns associated with it.

Augmented Reality (AR) and Virtual Reality (VR)

The differences between AR and VR were clarified. Their applications in gaming, education, and training were highlighted, demonstrating their transformative potential.

Challenges: Technical challenges and the need for content development in AR and VR were also discussed.

Quantum Computing

An overview of quantum computing principles and quantum bits (qubits) was provided. Mr. Barola explained quantum computing's potential to solve complex problems that are infeasible for classical computers. The current state of research and the expected timeline for practical applications were discussed.

In addition, the above Mr. Barola have demonstrated the working on "Mind Controlled" Drone which captured the brain signals from the volunteered participant and flew from his/her thought process. He also elaborated the technology involved in the drone movement and the sensors involved in capturing the brain signal. He also explained about the basic coding involved in the Drone Control process.

After the presentation and project demonstration, an interactive Q&A session was held, allowing participants/students to engage directly with Mr. Barola. The questions ranged from technical details of the discussed technologies to their broader societal impacts. Mr. Barola's detailed responses provided additional clarity and insights for the participants/students

Finally, the event concluded with a vote of thanks by the event coordinator, expressing gratitude to Mr. Barola for his comprehensive and enlightening session. Participants/Students are left with a deeper understanding of the emerging technologies and their potential applications.



Vote of Thanks



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Conclusion

The expert talk on “A 360 ° Interpretation on Emerging Technologies” provided a comprehensive overview of the latest technological advancements. Mr. S. Karan Barola’s insights into AI, IoT, blockchain, 5G, AR/VR, and quantum computing were both enlightening and inspiring. The interactive session facilitated deeper understanding and engagement. Participants left with valuable knowledge and a heightened appreciation for the transformative potential of these technologies. The event was a resounding success, marked by positive feedback and a call for continued

EVENT GALLERY





 **GPS Map**
Camera Lite

Latitude
12.6566484°
Longitude
80.1794766°

Local 10:45:37 AM
GMT 05:15:37 AM
Altitude 8 meters
Date Fri, 12 Jul 2024

M54H+HM8, Pattipulam, Tamil Nadu 603104, India

Note : Guest Lecture on "A 360 Interpretation on Emerging Technologies" -
12.07.2024



 **GPS Map**
Camera Lite

Latitude
12.6566451°
Longitude
80.1794753°

Local 10:45:51 AM
GMT 05:15:51 AM
Altitude 8 meters
Date Fri, 12 Jul 2024

M54H+HM8, Pattipulam, Tamil Nadu 603104, India

Note : Guest Lecture on "A 360 Interpretation on Emerging Technologies" -
12.07.2024





PARTICIPANT LIST

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