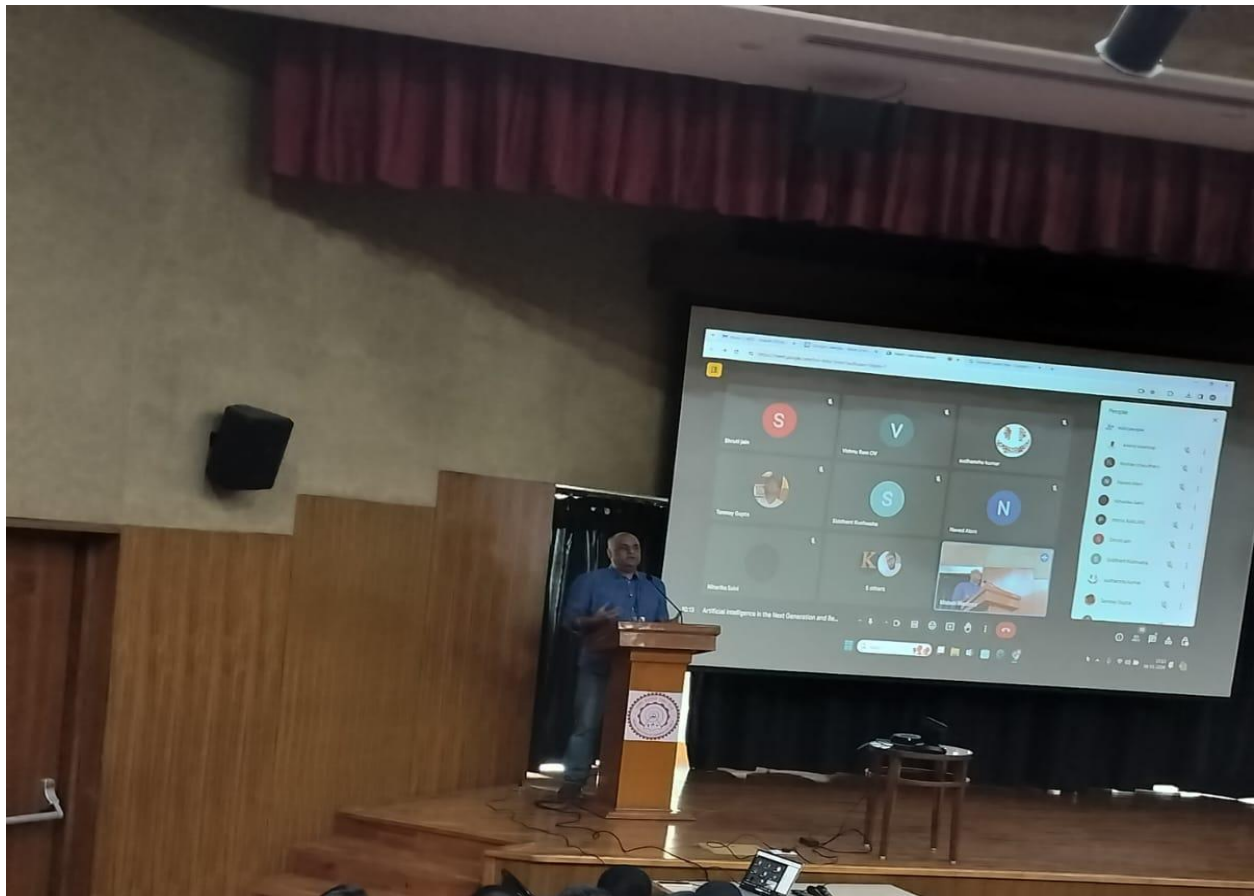# ARTIFICIAL INTELLIGENCE IN THE NEXT GENERATION AND BEYOND

Day-2 (Session 1)

Ms. Nargis Fayaz hosted the first session of Day 2 at the Artificial Intelligence in the Next Generation and Beyond workshop, focusing on Semantic Communication, held on March 9th, 2024. She initiated the session by delivering introductory remarks.

Prof. Brejesh Lall: He played a crucial part in the workshop by delivering the opening address, creating a welcoming atmosphere for attendees. Going beyond mere formalities, he shared substantial insights into important subjects such as semantics and wireless communication, demonstrating his expertise and enriching the event's significance. His active participation was essential in setting the workshop's tone and providing valuable perspectives on relevant topics.

Mr. Rahul Pandya: He contributed to the workshop with a remote presentation focusing on semantic communication, providing valuable insights into this complex subject. His expertise likely ignited discussions and enhanced participants' understanding of semantic principles. He covered various semantic topics, such as applications, challenges, and future possibilities. His active participation not only enriched the workshop's content but also underscored his expertise, improving the overall learning experience for attendees.

Prof. Vimal Bhatia: He presented an engaging and insightful discussion on Semantics during the workshop, he participated remotely. Throughout his presentation, he meticulously examined the intricacies of semantic communication, delving into its nuances to cultivate a deep understanding among participants. His talk not only shed light on the practical applications and advancements in semantics but also explored the far-reaching implications of this evolving field. By generously sharing his expertise and knowledge, he not only enriched the conference proceedings but also played a pivotal role in advancing the collective understanding of this fascinating subject.

Mr. Thushan Shivalingam: He contributed to the workshop in a clear and concise manner. It highlights his engaging presentation style, insightful exploration of semantics, and the positive impact of his participation on the conference. However, it could benefit from providing specific examples of the practical applications and advancements in semantics discussed by him to further strengthen the evaluation.

Prof. Sridhar Iyer: He delivered a captivating and enlightening presentation on Semantics, captivating the audience with his insights and expertise in the field. Throughout his session, he conducted a thorough and detailed analysis of various aspects of Semantic communication. His insights provided valuable contributions to the workshop, offering attendees a deeper understanding of the topic. By engaging with the complexities of Semantic communication, Professor Iyer stimulated meaningful discussions and empowered attendees with knowledge to address challenges in the field effectively. Overall, his presentation was instrumental in enriching the workshop experience and advancing participants' understanding of Semantic Communication.

Panel discussion

Moderator **Ms. Nargis Fayaz**, who is pursuing her PhD, wrapped up the session with a panel discussion centered on Semantic Communication: The Next Frontier in Communication. The esteemed panelists included **Prof. Ranjan Malik**, **Prof. Sridhar Iyer**, and virtually connected Professors **Rahul Pandya** and **Thushan Sivalingam**. Together, they delved into a comprehensive discussion on various facets of Semantic Communication, exploring its implications and potential advancements in the field. The panelists likely covered a wide range of topics, such as the application of semantic technologies in improving communication systems, the integration of natural language processing with communication networks, and the impact of semantic understanding on enhancing user experiences. Their collective expertise and insights likely provided attendees with valuable perspectives on the evolving landscape of communication technologies and the role of semantics in shaping its future trajectory. Overall, the panel discussion likely served as a thought-provoking and informative conclusion to the session, leaving attendees with a deeper understanding of Semantic Communication and its significance in the realm of communication technologies.

SESSION -2

Ms. Sanhita Pathak led the commencement of Session 2 at the Artificial Intelligence in the Next Generation and Beyond workshop, focusing on Next Generation Communication. She initiated the session by delivering introductory remarks.

Dr. Neeraj Kumar:
During the session, he conducted a captivating exploration of hyperspectral for metrology, immersing the audience in the intricacies of this specialized field. Throughout his presentation, he meticulously dissected the complexities inherent in hyperspectral imaging, providing a wealth of valuable insights that held the audience's attention. His thorough analysis and nuanced viewpoints were instrumental in driving the session's success, actively involving participants and fostering a deeper understanding of the subject matter. By elucidating the intricacies of hyperspectral metrology, he not only enriched the audience's knowledge but also inspired further inquiry and exploration in this cutting-edge domain. Overall, his session was both informative and engaging, leaving a lasting impact on participants' understanding of hyperspectral imaging in metrology.

Dr. Rajesh Kumar:
During his session, he led an engaging exploration into the field of haptics, captivating the audience with his insights and expertise. Throughout his presentation, he meticulously navigated through the intricacies of haptics, providing valuable insights that held the audience's attention. His comprehensive analysis and nuanced perspectives were pivotal in driving the success of the session, actively involving participants and fostering a deeper understanding of the subject. By delving into the complexities of haptics, he not only expanded the audience's knowledge but also encouraged further exploration and discussion in this evolving field. Overall, his session was instrumental in enhancing participants' understanding and appreciation of haptics, leaving a lasting impact on the audience.

Dr. Manoj Sharma:
During the session, the speaker led an enthralling exploration into the future of content in Next Generation Communication. With meticulous attention to detail, he delved deeply into the multifaceted aspects of this topic, providing the audience with invaluable insights that held their attention throughout the presentation. The speaker's comprehensive analysis and nuanced viewpoints were instrumental in the session's success, as they facilitated a deeper understanding of the subject matter among participants. By offering a rich blend of expertise and thought-provoking perspectives, the speaker actively engaged the audience, prompting meaningful discussions and fostering a greater appreciation for the evolving landscape of content in Next Generation Communication. Overall, his session left a lasting impact on attendees, who gained a clearer understanding of the complexities and potential implications of future content trends in communication.

Dr. Siddharth Srivastava:

During the session, the speaker conducted an engaging and informative discussion centered on 3D vision. Throughout his presentation, he meticulously explored the intricacies of this topic, providing the audience with valuable insights that captured their attention. The speaker's thorough analysis and nuanced perspectives were pivotal in the session's success, as they facilitated a deeper understanding of 3D vision among participants. By delving into the complexities of the subject matter, the speaker actively engaged the audience, sparking meaningful discussions and encouraging further exploration of the topic. Overall, his session significantly enhanced participants' knowledge and appreciation for 3D vision, leaving a lasting impact on their understanding of this emerging technology.

Panel discussion:

Moderator **Dr. Vinay Kaushik** effectively wrapped up the session with a panel discussion that centered on Next Generation Communication. The panelists, comprising esteemed experts **Dr. Neeraj Kumar**, **Dr. Manoj Sharma**, and **Dr. Siddharth Srivastava**, contributed their insights and expertise to a comprehensive exploration of next generation Communication. Throughout the discussion, they meticulously examined various dimensions of this topic, including its practical implications and potential advancements, shedding light on its significance in shaping the future of communication technologies. Their collective expertise and thoughtful discourse not only deepened participants' understanding but also inspired further exploration and innovation in the field. Overall, the panel discussion served as a fitting conclusion to the session, leaving attendees with valuable insights and ideas for future research and development.