Workshop Report

"Harnessing AI in Healthcare Education and Research: A Multifaceted Approach"

Organized by:

All India Institute of Medical Sciences (AIIMS), Rajkot, Gujarat

Date and Venue:

Date: November 19, 2023

Time: 10:00 AM to 1:00 PM

Venue: Lecture Hall -1, Boys Hostel, AIIMS Rajkot

Workshop Overview:

The workshop aimed to integrate Artificial Intelligence (AI) into healthcare, focusing on its application in education and research. It targeted faculties of AIIMS Rajkot, intending to enhance their understanding and skills in AI and guide them in incorporating AI modules into their curriculum.

Objectives:

1. **Educational Enhancement:** Equipping faculties with knowledge and skills for integrating AI in healthcare education.
2. **Research Capacity Building:** Offering insights into AI's role in healthcare research.
3. **Practical Exposure:** Providing hands-on experience with AI tools and technologies.
4. **Data Processing Guidance:** Educating on handling data for AI applications and ethical considerations.

Participants Details

This workshop was attended by 42 faculties across all departments of AIIMS Rajkot.

Pre-Workshop Preparation:

In preparation for the workshop, participants were provided with comprehensive workshop resource materials in their respective emails prior to the workshop. This material included detailed outlines of the sessions, background reading on AI in healthcare, and pre-workshop assignments to ensure a foundational understanding of the topics to be discussed. This proactive approach was designed to maximize the learning experience by allowing participants to familiarize themselves with key concepts and tools in advance.

Detailed Workshop Report:

The workshop began with the respected Executive Director Prof Dr. (Col) CDS Katoch sir inaugurating the session, emphasizing the importance of Artificial Intelligence in the current healthcare landscape. He highlighted the transformative role AI could play in enhancing patient care and research methodologies.

Following the inauguration, Prof (Dr.) Sanjay Gupta led the first session, providing a thorough introduction to AI in healthcare education and research. He discussed the foundational aspects of AI and its critical need within the healthcare curriculum, addressing how AI can revolutionize various facets of healthcare, including diagnostics, treatment planning, and patient care management.

The workshop then transitioned to a hands-on experience with open-access AI software, guided by Dr. Pradip Chauhan and Dr. Lalit Ratanpara. This session offered practical demonstrations and interactive exercises, enabling participants to directly engage with AI tools. These exercises demonstrated how such technologies could be effectively utilized in healthcare settings to improve outcomes and efficiency.

Dr. Abhishek Padhi and Dr. Vinay Chitturi presented a real-world application of AI in healthcare by focusing on a Sepsis Prediction Model. This session offered an in-depth look at the development, training, and testing phases of an AI algorithm, providing a tangible example of how AI can be used in predictive diagnostics and treatment planning.

Further emphasizing practical application, Dr. Bhautik Modi explored the ethical considerations and guidelines essential in handling patient data, an increasingly important topic in the era of digital healthcare.

The workshop concluded with Dean Academics Prof. Dr. Sanjay Gupta summarizing the day's learning, reflecting on the insights shared and the importance of integrating AI into healthcare education and research. The session ended with a call to action for the participants to apply their new knowledge in their teaching and research activities, thereby contributing to the advancement of AI in healthcare followed by a valedictory function.

Feedback and Evaluation:

At the conclusion of the workshop, participants were provided with a feedback form through a Google Sheet. This form was designed to gather genuine feedback on the workshop and to allow participants to rate each session. The organizers emphasized the importance of this feedback as a critical tool for assessing the effectiveness of the workshop and for guiding future improvements. The feedback was intended to capture the participants' overall experience, the relevance and quality of the content, the effectiveness of the presenters, and the applicability of the skills learned. 21 participants submitted the feedback form giving a score in between 4-5 out of 5 for all the sessions overall expressing satisfaction with the workshop and it's content.

Preparations for Participants:

- Technology Requirements: Participants were advised to bring a fully charged laptop to engage effectively in the hands-on sessions.
- Additional Requirements: A laptop charger and a backup internet connection were recommended for uninterrupted participation.

Future Implications:

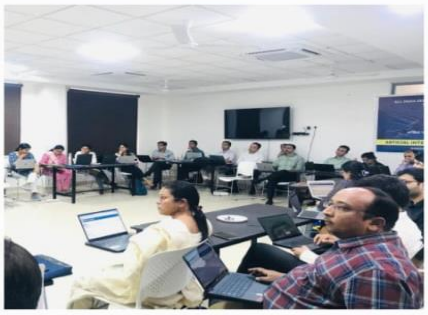
The workshop's impact extends beyond its immediate educational objectives, setting the stage for future advancements in the integration of AI in healthcare. The skills and knowledge imparted to participants are expected to catalyze the development of innovative AI

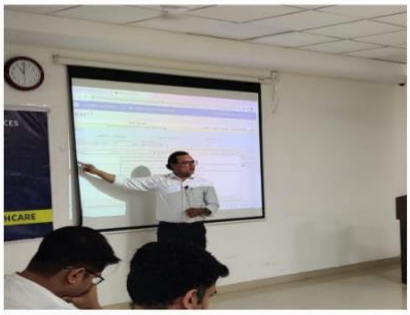
applications in clinical settings, research, and healthcare education. Moreover, the workshop fosters a community of healthcare professionals who are well-versed in AI, creating a network for ongoing collaboration and knowledge sharing. This is particularly significant in an era where AI's role in healthcare is rapidly expanding, necessitating a workforce that is not only knowledgeable but also adaptable to technological advancements. The feedback and insights gained from this workshop will inform the development of future programs, ensuring they remain relevant and impactful in the ever-evolving field of AI in healthcare.

Conclusion:

This workshop served as a platform for knowledge exchange and skill development in AI for healthcare professionals. It not only focused on theoretical understanding but also emphasized practical applications, thereby preparing the participants for the evolving landscape of AI in healthcare education and research. Through a blend of theoretical knowledge and practical exercises, the workshop offered a comprehensive understanding of AI's role in healthcare education and research, equipping participants with the skills and insights needed to navigate and contribute to this rapidly evolving field. The feedback collected will play a crucial role in enhancing future workshops and ensuring they continue to meet the evolving needs of healthcare professionals. With its far-reaching implications, the workshop marks a significant step towards the future of AI in healthcare.

Few Glimpse of the workshop





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ARTICIAL INTELLIGENCE IN HEALTHCARE
HANDS-ON WORKSHOP ON AI

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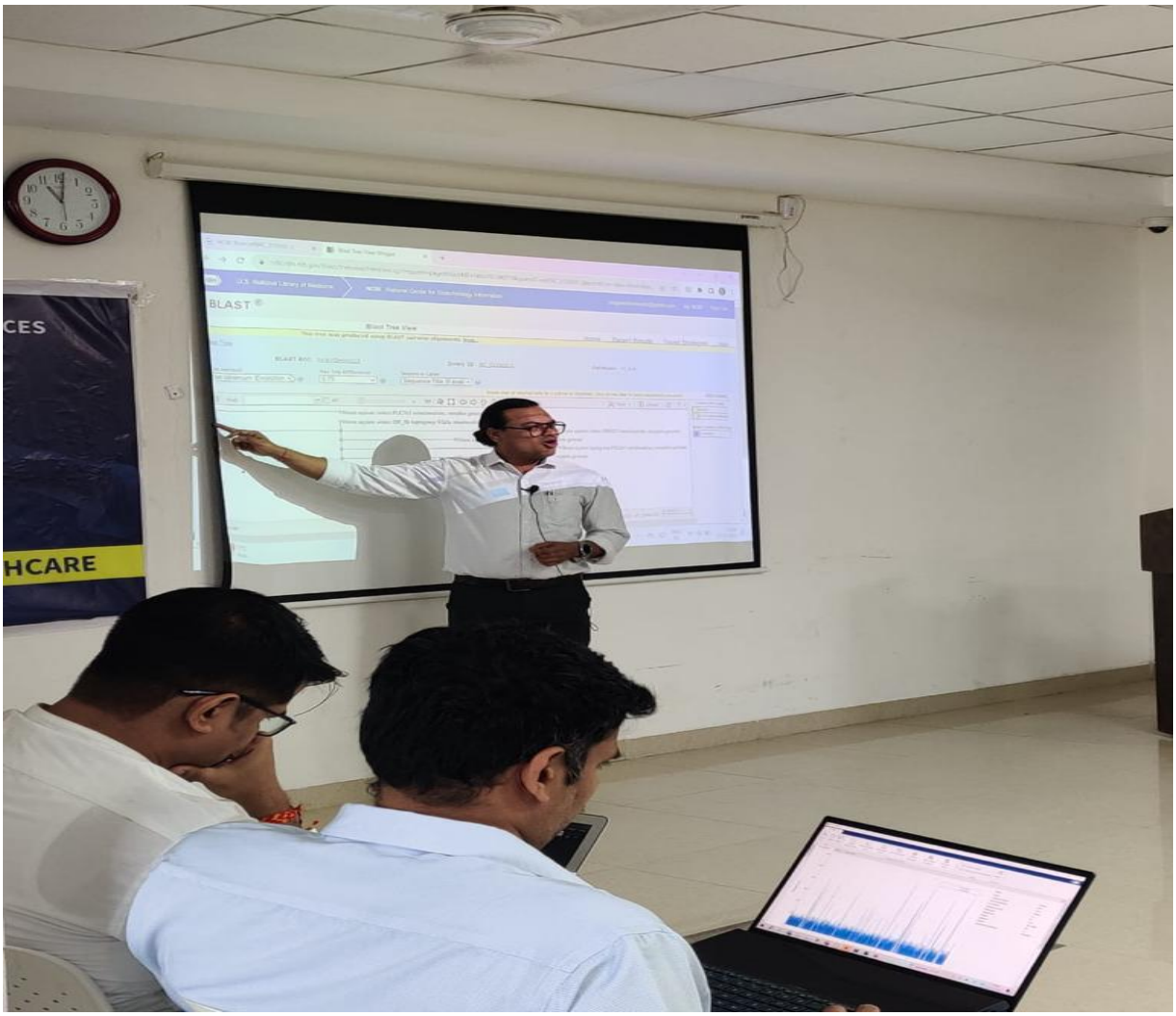
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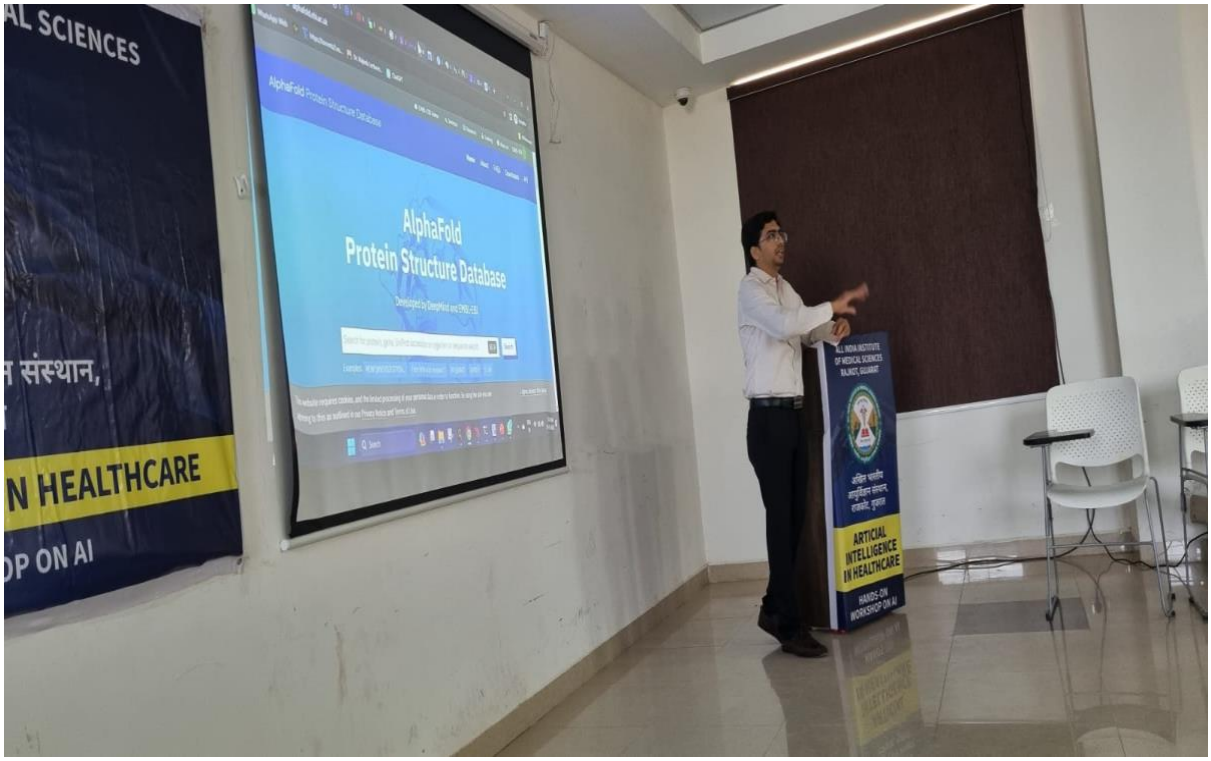
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