

# KONERU LAKSHAMIAH EDUCATION FOUNDATION DEPARTMENT OF BIOTECHNOLOGY

## AIML Workshop on Understanding Brain Disorders

(19-21st Feb 2024)

On February 19th, 2024, the workshop on “*Explainable AI in Brain Disorders*” commenced with a stimulating inauguration ceremony. Esteemed dignitaries from the scientific community addressed the gathering, emphasizing the immense potential of artificial intelligence to revolutionize our understanding of the brain. This opening session served to energize the assembled researchers, setting the stage for a week of intensive exploration and collaboration at the forefront of this exciting new frontier.



### The Inauguration Ceremony

The workshop commenced in a most auspicious manner, with a heartfelt welcome extended by Professor Jagannatha Rao. This warm introduction set the stage for a day of profound exploration. Professor Daniel Racoceanu of Paris then served to illuminate the context and background of the event. Following this intellectual overture, the esteemed President of KL University, K. Satyanarayana, graced the gathering with an inaugural address. Dr. Nitin Seth, Director of CEFIPRA, then added his own insightful remarks, further enriching the atmosphere of intellectual exchange. The morning culminated in a series of keynote addresses – veritable intellectual feasts delivered by some of the most prominent figures in the field. These included the esteemed Directors of both IIT Mumbai and NIMHANS, along with two additional luminaries whose contributions promised to ignite the minds of those present.



## **Explainable AI in Brain Disorders**

In a distinguished assemblage of scientific minds, Professor Daniel Racocanu of the Sorbonne University's Paris Brain Institute and Inria spearheaded a discourse on the burgeoning field of Explainable

AI in Brain Disorders. This symposium brought together a consortium of esteemed researchers. Dr. Shilpa Rao of NIMHANS, Bangalore offered her expertise on Neuropathology, while Dr. Neelam Sinha from IISc, Bangalore, shed light on the intricacies of Machine Learning and Imaging. Dr. Rajalakshmi Borthakur of Teblux.Com, Bangalore, contributed her insightful work to the discussion. Furthermore, Dr. Srinivas from IIT-Madras delved into the complexities of Computational Neuroscience, and Dr. Hari Varma from IIT-Mumbai elucidated the theoretical and computational aspects of diffuse optical tomography within the realm of inverse problems in medical imaging. This erudite discourse promised to unveil groundbreaking advancements at the intersection of artificial intelligence and our understanding of the human brain.



### **A Workshop for Elite Minds in Explainable AI**

Due to the esteemed nature of the workshop on Explainable AI in Brain Disorders, participation was reserved for leading researchers in the field. This selectivity ensured a high caliber of discourse, as only those with demonstrably significant contributions in artificial intelligence,

neuroscience, or neuroimaging were invited. This exclusivity fostered an environment of mutual respect and intellectual exchange, where every participant's insights were valued for their potential to propel the field forward.



### **The Workshop's Inspiring Conclusion**

The workshop culminated in a truly inspiring manner, leaving a profound impact on all participants. The esteemed faculty, from Professor Racoceanu's pioneering work in Explainable AI to Dr. Varma's intricate explanations of medical imaging, provided a wealth of knowledge and ignited a collective passion for this burgeoning field. The exchange of ideas between these brilliant minds, along with the contributions from Dr. Borthakur and others, fostered a collaborative spirit that promised significant leaps forward in unraveling the mysteries of the brain through the lens of artificial intelligence. This workshop undoubtedly served as a springboard for groundbreaking research and left everyone eager to translate these insights into tangible advancements in the realm of brain disorders.