AI and Deep Learning in Healthcare

Prof. Sudipta Roy Computer Science and Engineering, Assam University, INDIA

Abstract

Healthcare system is a sensitive-essential issue for all the countries but its impact is very high in the developing countries. The healthcare system has been transformed from manual-labour oriented system to device-controlled semi-automated system. Currently the researchers are making the system intelligence-controlled by incorporating AI. Though the concept of AI is prevailed since the advent of computers in the mid-20th century, but the superhuman performance is achieved only in recent years by combining several technological advancements like embedding of AI in many small devices and sensors and distributed the computing strategy; tremendous volume of data produced by the healthcare system is managed in the nomenclature of 'Big Data'; variety of data in terms of volume and quality has motivated the trsnsformation from artificial intelligence to machine learning to deep learning. The performance of these algorithms has reached astonishing levels. This presentation will focus on the applications of AI and deep learning in healthcare system.

Keywords: Deep learning, Artificial intelligence, Machine learning, Healthcare system, Big Data.