

Applications of Artificial Intelligence (AI) in Medical Field

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Abstract: *Artificial intelligence (AI), through improving patient outcomes, optimising treatment plans, and improving diagnostic accuracy, is revolutionising the medical field. AI technologies including machine learning, computer vision, and natural language processing are being incorporated into clinical procedures to help doctors make choices. From early disease detection through imaging analysis to robotic surgery and tailored medicine, AI applications are reducing human error and increasing efficiency. Predictive analytics powered by AI is also useful for epidemiology and public health surveillance. Notwithstanding these advancements, concerns remain around data privacy, ethics, and the need for transparent, intelligible models. In this essay, recent AI applications in healthcare are examined, their benefits and drawbacks are evaluated, and possible future directions for AI-powered medical improvements are discussed*

Keywords: Artificial Intelligence, Healthcare, Medical Imaging, Robotics in Surgery, Health Informatics

