Four Sensitive Areas of AI Applications:
Public Administration, Predictive Policing, Health Services, and Target Advertising

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ABSTRACT

AI is a strong tool with the potential to transform society and improve individuals' and communities' overall well-being. This research study examines the uses, advantages, ethical issues, and possible obstacles of artificial intelligence of four key AI applications in depth. This article discusses the potential of AI in the real world. AI is no longer just a few machines doing basic calculations. The real-world AI applications are wired using a cross-disciplinary approach based on real-life mathematics, computer science, linguistics, psychology, and many more domains. This article investigates the ethical dimensions of four key AI applications: public administration, predictive policing, health services, and targeted advertising. It highlights concerns such as fairness, transparency, privacy, and bias within each domain. By critically examining the ethical implications across these sensitive domains, this article aims to stimulate dialogue and inform the development of ethical guidelines and regulatory frameworks to ensure responsible AI deployment and uphold societal values.

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1.INTRODUCTION

AI also is a revolutionary area at the crossroads of both computer science and cognitive functionality. AI systems can exhibit characteristics of human-like intelligence by being able to learn through experience, find solutions to problems, and do tasks that would otherwise require a human touch. There are numerous components that make up AI, such as: machine learning (ML), natural language processing (NLP), and computer vision. The machine learning component refers to algorithms that improve with time based on experience rather than having to rewrite the programs that drive those algorithms. The NLP component works with machines interpreting, producing and processing human language. · Artificial Intelligence can provide a great many different uses in real-world applications, including healthcare, finance, retail, customer service, education. etc. AI also has been largely responsible for the improvement of public administration, predictive police work, health services and targeted advertisements during the last twenty years. · AI has become an important part of changing the way that we view our responsibilities as members of society, making our responsibilities more efficient and more effective within the context of public administration. Innovation resulting from AI will likely create enormous changes in the way that public administration organisations do business, and will have a direct impact on the citizens and the overall society who will benefit from these transportation improvements. Predictive policing is currently being utilized by law enforcement agencies through AI, which is expected to change how many law enforcement officials work in the near future. The use of Predictive Policing uses highly advanced algorithms and data analysis in order to create statistics that enable police to predict where future crime will occur; this also allows police departments to better allocate resources when responding to crime. The convergence of technology and public safety has the potential to enhance crime deterrence and facilitate improved safety and security within communities. Although there are real issues that need to be addressed in a judicious manner, many are often misconstrued based on lack of understanding. Frequently, key terms used within these conversations are not universally defined or use multiple definitions; unfounded assertions and misstatements are commonplace, and discussions can drift away from the agenda and have political/economic/self-serving motivations driving them.

The transforming power of Artificial Intelligence (AI) is dramatically impacting the Healthcare Industry as we move into a new era of innovation. Advanced algorithms and machine-learning technologies are being used with AI to effectively change how we diagnose diseases, determine treatment options and deliver healthcare.

AI is responsible for a variety of healthcare applications. It allows us to use data to improve our ability to detect diseases from medical images earlier in the progression or through previously unknown diseases. AI also allows healthcare professionals to create better estimates of personalised medicine through data driven insights. As a result, AI is fundamentally changing the way that healthcare professionals evaluate problems. To date, the main uses of AI in healthcare have been to increase the speed and accuracy of healthcare delivery.

In the rapidly evolving landscape of marketing and consumer interaction, AI has emerged to be a powerful tool, particularly in targeted advertising. AI algorithms enable businesses to analyse large amounts of consumer data; therefore, allowing them to leverage AI's vast potential to accurately reach consumers like never before (Narain, 2021). Using AI for targeted advertising enables businesses to predict the preferences of consumers i.e. customers are most likely to respond to a given ad; also to use various intelligent methods to optimise where customers will see an ad as well as optimise customer satisfaction by creating the most effective ad for each specific customer. Consequently, AI's application in