**Application of Artificial Intelligence in Healthcare:**

**Chances and Challenges**

***Ravi Manne and Sneha C. Kantheti***

The paper explores the increasing application of artificial intelligence (AI) in the healthcare industry. It discusses how various AI technologies, such as machine learning and deep learning, are being utilized across different areas of healthcare, including diagnosis, treatment design, electronic health records, drug discovery and interactions, dermatology, radiology, and mental health.

For example, AI algorithms can analyze medical images like CT scans and X-rays to detect diseases more accurately and rapidly than human experts. AI is also being used to interpret electronic health records to predict the likelihood of diseases based on patient history. In drug discovery, machine learning techniques are helping to reduce the lengthy and costly process by assisting in identifying new drug compounds and repurposing existing ones. The paper highlights the potential of AI to improve patient outcomes and healthcare efficiency, while also acknowledging the challenges involved in implementing these technologies, such as data privacy concerns and the need for robust regulations.

Overall, the paper provides a comprehensive overview of the diverse applications of AI in transforming various aspects of healthcare delivery and management. It suggests that the continued advancement and responsible integration of AI holds promising opportunities for enhancing patient care and overcoming existing healthcare challenges.