The AI Era: Innovations, Challenges, and Applications

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Abstract: *In the coming years, intelligent machines are poised to augment or replace human abilities across multiple domains. Artificial intelligence (AI), a subset of computer science, demonstrates machine or software intelligence. Over the past two decades, AI has significantly bolstered performance in manufacturing, services, and education. The proliferation of AI has led to the emergence of expert systems, revolutionizing problem-solving in education, engineering, business, medicine, and weather forecasting. Its widespread application has notably improved quality and efficiency in various sectors. This paper offers a concise overview of AI, emphasizing its significance in education, encompassing its definition, search methodologies, breakthroughs, and future prospects.*

Keywords: Artificial Intelligence (AI), Artificial Neurons (Neural Networks), Expert Systems, Heuristics

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