

Name _____

Exploring the Marvelous Applications of Artificial Intelligence and Machine Learning

Open-Ended Response Answer Key

1. Answer: AI can improve medical accuracy by analyzing vast amounts of medical data and research papers, helping doctors make more informed decisions. It can also assist in diagnosing diseases early, predicting patient outcomes, and recommending personalized treatment plans based on patient data.
2. Answer: In a world without self-driving cars, transportation would rely solely on human drivers, potentially leading to more accidents caused by human errors like distractions and fatigue. Self-driving cars can enhance road safety by reducing these risks and providing more efficient transportation.
3. Answer: Advantages of AI in finance include its ability to analyze vast amounts of financial data quickly and accurately, detecting fraudulent transactions in real-time, and enhancing overall security. Disadvantages may include concerns about privacy and the potential for false positives, leading to inconvenience for customers.
4. Answer: In the coming years, AI and ML may further enhance healthcare by enabling more precise treatments, improve transportation with autonomous vehicles, and revolutionize industries through automation and data analysis. Examples include AI-driven personalized medicine, more advanced self-driving cars, and AI-powered virtual assistants becoming even more integrated into our daily routines.

