

Summary:

deep learning is a subset of machine learning that focuses on artificial neural networks . deep learning has revolutionized the field of artificial intelligence (AI) popular architectures like AlexNet, VGGNet, ResNet, and EfficientNet have demonstrated outstanding performance . deep learning has found applications in autonomous systems, particularly selfdriving cars . Tesla, Waymo, and NVIDIA are heavily investing in deep learning research . deep learning is playing a crucial role in robotics, enabling machines to perceive their environment . researchers are exploring explainable AI techniques to make deep learning models more transparent . in drug discovery, deep learning is accelerating the development of new pharmaceuticals . ethical considerations and responsible AI development become increasingly important . deep learning has transformed artificial intelligence by enabling machines to learn and perform complex tasks .