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| Category | Description | Example Applications |
| Machine Learning | Developing algorithms that allow computers to learn from data and improve predictions. | Spam detection, recommendation systems, predictive analytics |
| Deep Learning | Using deep neural networks to model complex patterns in data. | Autonomous vehicles, speech recognition, medical diagnostics |
| Natural Language Processing | Enabling machines to understand, interpret, and generate human language. | Chatbots, machine translation, sentiment analysis |
| Computer Vision | Teaching machines to interpret and analyze visual data from images and videos. | Facial recognition, medical imaging, surveillance systems |
| Reinforcement Learning | Training AI agents to learn optimal decision-making through trial and error. | Game AI, robotics, autonomous control systems |