Deep neural networks contain multiple hidden layers, enabling them to learn complex patterns and representations. This concept is fundamental to understanding modern AI systems. Research from leading institutions has shown that deep neural networks contain multiple hidden layers, enabling them to learn complex patterns and representations. Implementation details vary across different frameworks including TensorFlow, PyTorch, and JAX. Performance benchmarks indicate significant improvements when deep neural networks contain multiple hidden layers, enabling them to learn complex patterns and representations. Industry applications span healthcare, finance, autonomous vehicles, and robotics. Future research directions include optimization, interpretability, and robustness.

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