

Deep Learning

Project Ideas/Titles

S.No	Title	Description
1	Image Captioning System	Build a model to generate captions for images using CNNs and RNNs.
2	Handwritten Digit Recognition	Develop a deep learning model using MNIST data to recognize handwritten digits.
3	Object Detection with YOLO	Implement the YOLO algorithm to detect objects in real-time.
4	Neural Style Transfer	Create a system to transfer artistic styles from one image to another.
5	Face Recognition System	Build a model to recognize and authenticate faces using deep learning.
6	Speech-to-Text Converter	Create a model to transcribe speech into text using deep learning frameworks.
7	Text Summarization	Build a deep learning model to summarize long text documents or articles.
8	AI-Powered Chatbot	Develop a chatbot using natural language processing and deep learning techniques.
9	Deepfake Detection	Create a model to detect manipulated images or videos generated using deepfake techniques.
10	Autonomous Driving Simulation	Build a self-driving car simulation using computer vision and reinforcement learning.









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n	Sentiment Analysis with BERT	Use BERT to classify the sentiment of text data from customer reviews or social media posts.
12	Language Translation	Build a model for translating text from one language to another using seq2seq networks.
13	Video Frame Prediction	Predict future frames in a video using deep learning models like ConvLSTMs.
14	Music Genre Classification	Develop a model to classify music into genres using audio spectrograms.
15	Disease Diagnosis from Medical Images	Use CNNs to detect diseases like pneumonia or cancer from X-rays or CT scans.
16	Human Activity Recognition	Build a model to classify human activities like walking, running, or sitting using sensor data.
17	Recommendation System with Autoencoders	Develop a recommendation engine for products or movies using autoencoders.
18	Time-Series Forecasting with RNNs	Use LSTMs or GRUs to predict stock prices or weather patterns.
19	AI-Based Content Filtering	Create a deep learning model to automatically flag inappropriate or harmful online content.
20	Real-Time Emotion Detection	Build a system to detect emotions from facial expressions using deep learning.









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21	Image Super-Resolution	Develop a model to upscale low-resolution images using deep learning.
22	GANs for Image Generation	Use Generative Adversarial Networks to create realistic images.
23	Audio Source Separation	Separate different audio sources, such as vocals and instruments, from a music file.
24	Pose Estimation	Build a model to estimate human body pose from images or videos.
25	AI-Powered Virtual Assistant	Create a virtual assistant capable of voice commands, scheduling, and answering queries.
26	Neural Machine Translation	Train a deep learning model to perform machine translation for rare or regional languages.
27	Self-Healing Networks	Use deep learning for anomaly detection and auto- healing in network infrastructures.
28	Real-Time Traffic Sign Detection	Build a model to detect and classify traffic signs for autonomous vehicles.
29	3D Object Reconstruction	Use deep learning to reconstruct 3D objects from 2D images.
30	AI-Based Personalized Learning System	Develop an adaptive learning platform that adjusts content based on student performance.





