Al Course Project Ideas 19/01/24, 2:53 PM

Artificial Intelligence Course Project Ideas

Sno.	Project Title	Al Model/Framework
1	Sentiment Analysis on Social Media Posts	Natural Language Processing
2	Object Detection in Images	YOLO (You Only Look Once)
3	Fraud Detection in Financial Transactions	Random Forest
4	Facial Recognition System	OpenCV, Dlib
5	Stock Price Prediction	LSTM (Long Short-Term Memory)
6	Autonomous Drone Navigation	Reinforcement Learning
7	Handwritten Digit Recognition	MNIST Dataset, CNN
8	Chatbot for Customer Support	Rasa, Dialogflow
9	Speech Emotion Recognition	CNN, RNN
10	Traffic Sign Recognition	TensorFlow, Keras
11	Natural Language Translation	Transformer Model
12	Predictive Maintenance for Equipment	XGBoost, SVM
13	Recommendation System for Movies	Collaborative Filtering
14	Image Style Transfer	Neural Style Transfer
15	Credit Scoring System	Decision Trees, SVM
16	Health Monitoring using Wearables	loT, Machine Learning
17	Autonomous Car Simulation	CARLA Simulator
18	Spam Email Detection	Naive Bayes, SVM
19	Anomaly Detection in Network Traffic	Autoencoders
20	News Article Summarization	BERT
21	Virtual Personal Assistant	Amazon Alexa, Google Assistant
22	Game Playing AI (e.g., Chess, Go)	AlphaGo, Stockfish
23	Human Activity Recognition	LSTM, Accelerometer Data
24	Automated Code Review	CodeBERT
25	Gesture Recognition	Leap Motion, OpenPose
26	Music Genre Classification	CNN, Audio Features
27	Predicting Employee Attrition	Logistic Regression
28	Diabetic Retinopathy Detection	CNN, Kaggle Dataset
29	Predicting Housing Prices	Linear Regression, Gradient Boosting
30	Smart Home Energy Management	Reinforcement Learning
31	Predicting Customer Churn	Random Forest, XGBoost

Al Course Project Ideas 19/01/24, 2:53 PM

32	Fake News Detection	BERT, LSTM
	Automated Language Translation for Chat Apps	Seq2Seq, Attention Mechanism
34	Human Pose Estimation	PoseNet, OpenPose
35	Object Tracking in Videos	SORT (Simple Online and Realtime Tracking)
36	Wildlife Species Identification	InceptionV3, Transfer Learning
37	Cybersecurity Threat Detection	Deep Packet Inspection, LSTM
38	Food Recognition	MobileNet, Food-101 Dataset
39	Predicting Loan Approval	CatBoost, Random Forest
40	Handwritten Text Recognition	Tesseract OCR, CRNN
41	Face Mask Detection	OpenCV, MobileNet
42	Network Intrusion Detection	IDS, Random Forest
43	Clothing Style Transfer	CycleGAN
	Real-time Language Translation for Video Calls	OpenNMT, WebRTC
45	Handwritten Signature Verification	Siamese Network, Triplet Loss
	Indoor Localization using Wi-Fi Fingerprints	KNN, Localization Algorithms
47	Text-to-Speech Synthesis	Tacotron, WaveNet
48	Movie Script Generation	GPT-2
49	Automated Image Captioning	Show and Tell Model
50	Human Gait Recognition	LSTM, Kinect Sensor
51	Disease Diagnosis from Medical Images	CNN, DICOM
	Autonomous Robot Navigation in Unknown Environments	SLAM (Simultaneous Localization and Mapping)
53	Predicting Weather Patterns	LSTM, Weather API
	Smart Agriculture: Crop Disease Detection	CNN, Transfer Learning
55	Emotion-aware Virtual Reality Experience	Affectiva SDK, Unity
56	Energy Consumption Forecasting	ARIMA, LSTM
57	Social Network Analysis	Graph Neural Networks
58	Cyberbullying Detection	NLP, Text Classification
59	Language Identification in Multilingual Texts	FastText, Language Embeddings
60	Road Lane Detection	Hough Transform, OpenCV
61	Voice Cloning	DeepVoice, Tacotron
62	Object Recognition in 3D Point Clouds	PointNet, PointNet++
63	Satellite Image Segmentation	U-Net, Satellite Imagery
	1	

Al Course Project Ideas 19/01/24, 2:53 PM

65	Autonomous Underwater Vehicle Navigation	DQN, AUVSim
66	Poetry Generation	LSTM, Poetry Datasets
67	Personalized News Recommendation	Matrix Factorization, SVD
68	Visual Question Answering	VQA Model
69	Speech-to-Text for Multiple Languages	Multilingual ASR, DeepSpeech
70	Wildlife Sound Classification	CNN, Audio Spectrograms
71	Human Rights Violation Detection in Images	CNN, Human Rights Datasets
72	Predicting Air Quality	Random Forest, Air Quality Data
73	Virtual Try-On for Fashion	GAN, Fashion Datasets
74	Gesture-based Control for Smart Homes	Leap Motion, Gesture Recognition
75	Content Moderation in Online Platforms	BERT, Text Classification
76	E-commerce Product Recommendation	Collaborative Filtering, Matrix Factorization
77	Document Similarity Analysis	Doc2Vec, Similarity Metrics
78	Cybersecurity Incident Response Automation	SOAR (Security Orchestration, Automation, and Response)
79	Video-based Driver Drowsiness Detection	CNN, Facial Landmarks
80	Plant Disease Detection	CNN, PlantVillage Dataset
81	Anonymizing Sensitive Information in Text Data	NLP, Named Entity Recognition
82	Deepfake Detection	Deepfake Detection Models