ML Algorithms and Projects : Sheet1

ML ALGORITHMS AND PROJECT GUIDE BY @MUSTAFAI$

	ML Algorithm	Problem Statement	Project Idea	Public Dataset	Predic
Supervised	Simple Linear Regression	How does square footage affect house prices?	Predicting house prices based on square footage	https://www.kaggle.com/c/boston-housing	Continu
	Multiple Linear Regression	How do study hours and attendance affect student performance?	Predicting student performance based on study hours and attendance	https://archive.ics.uci.edu/ml/datasets/Student+Performance	Continu
	Decision Trees	How do leaf measurements predict the species of a plant?	Classifying species of plants based on leaf measurements	https://archive.ics.uci.edu/ml/datasets/Iris	Continu
	Random Forest	How can we detect fraud in credit card transactions?	Fraud detection in credit card transactions	https://www.kaggle.com/mlg-ulb/creditcardfraud	Continu (multiple
	Support Vector Machines	Can we classify images of cats and dogs based on their features?	Image classification (e.g.identifying cats vs dogs)	https://www.cs.toronto.edu/~kriz/cifar.html	Continu
	K-Nearest Neighbors	How does the proximity to stores affect house prices?	Recommender system for movies based on user ratings	https://grouplens.org/datasets/movielens/	Continu
	Gradient Boosting Machines	How can we predict customer churn in a subscription service based on usage patterns?	Predicting customer churn in a subscription service	https://www.kaggle.com/blastchar/telco-customer-churn	Continu
	Naive Bayes	How can we classify emails as spam or not spam based on their content?	Email spam detection	https://spamassassin.apache.org/publiccorpus/	Categor
	Neural Networks	How can we recognize handwritten digits?	Handwriting recognition (e.g.MNIST dataset)	http://yann.lecun.com/exdb/mnist/	Continu
Unsupervised	K-Means Clustering	How can we segment customers based on their purchasing behavior?	Customer segmentation for targeted marketing	https://www.kaggle.com/vjchoudhary7/customer-segmentation-tutorial	Continu
	Hierarchical Clustering	How can we group similar articles based on text content?	Grouping similar articles based on text content	http://qwone.com/~jason/20Newsgroups/	Continu
	Principal Component Analysis (PCA)	How can we reduce the number of features in a dataset while preserving variance?	Reducing features in a high-dimensional dataset for visualization	https://archive.ics.uci.edu/ml/datasets/wine	Continu
	Independent Component Analysis (ICA)	How can we separate mixed audio signals into their original sources?	Separating audio signals from a mixed recording	http://www.cis.hut.fi/projects/ica/cocktail/cocktail_en.cgi	Continu
	Apriori Algorithm	What product combinations are commonly bought together?	Market basket analysis for retail stores	https://archive.ics.uci.edu/ml/datasets/online+retail	Categor
	DBSCAN	How can we identify clusters of crime incidents in geographic	Identifying geographic clusters of crime incidents	https://www.kaggle.com/shivamb/real-time-crime	Continu

Published by Google Sheets – Report Abuse – Updated automatically every 5 minutes