

# Machine Learning Major Project

## Online Payments Fraud Detection with Machine Learning

Here we are training a machine learning model for classifying fraudulent and non fraudulent payments.

For this, we are attaching a dataset containing information about online payment fraud, so that we can understand what type of transactions lead to fraud.

We are providing a **dataset** from Kaggle, which contains historical information about fraudulent transactions which can be used to detect fraud in online payments. Below are all the columns from the dataset I'm using here

1. step: represents a unit of time where 1 step equals 1 hour
2. type: type of online transaction
3. amount: the amount of the transaction
4. nameOrig: customer starting the transaction
5. oldbalanceOrg: balance before the transaction
6. newbalanceOrig: balance after the transaction
7. nameDest: recipient of the transaction

8. oldbalanceDest: initial balance of recipient before thetransaction
9. newbalanceDest: the new balance of recipient after thetransaction
10. isFraud: fraud transaction

Dataset is attached below. Use this to detect online payment fraud using python.

**TO BE SUBMITTED – Code of the project, in PDF Format.**

Dataset:

	step	type	amount	nameOrig	oldbalanceOrig	newbalanceOrig	\
0	1	PAYMENT	9839.64	C1231006815	170136.0	160296.36	
1	1	PAYMENT	1864.28	C1666544295	21249.0	19384.72	
2	1	TRANSFER	181.00	C1305486145	181.0	0.00	
3	1	CASH_OUT	181.00	C840083671	181.0	0.00	
4	1	PAYMENT	11668.14	C2048537720	41554.0	29885.86	
	nameDest	oldbalanceDest	newbalanceDest	isFraud	isFlaggedFraud		
0	M1979787155	0.0	0.0	0	0		
1	M2044282225	0.0	0.0	0	0		
2	C553264065	0.0	0.0	1	0		
3	C38997010	21182.0	0.0	1	0		
4	M1230701703	0.0	0.0	0	0		

