

The entire codebase for the Fraud Detection using unsupervised learning and supervised learning was developed in Python.

We developed the code in Kaggle and Jupyter notebooks.

Dataset: <https://www.kaggle.com/datasets/computingvictor/transactions-fraud-datasets>

However, all the codes are available in zip file(code folder contains in both ipynb and html format)

The zip file contains:

### **1. Code folder**

- i. fraud-detection-unsupervised learning(in both ipynb and html files) ii.
- Fraud-detection-supervised learning(in both ipynb and html files)

### **2. Dataset folder**

The datasets is available in csv and json format. The data loading can be done by giving the path. There dataset folder contains transactions file(transactions\_data.csv) and labels file(train\_fraud\_labels.json).

For unsupervised learning - load only transactions file.  
For supervised learning - load both transactions and labels file.

**The datasets can be loaded by giving the path and installing python, required dependencies and required libraries(pandas, numpy, scikit-learn, matplotlib, seaborn) to run the code.**

### **3.Text file**

However, all the code and required data is available in zip file.

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### **References:**

1. [https://www.sciencedirect.com/science/article/abs/pii/S0952197618301520?fr=RR2&ref=pdf\\_download&rr=8eb9987ca8682379](https://www.sciencedirect.com/science/article/abs/pii/S0952197618301520?fr=RR2&ref=pdf_download&rr=8eb9987ca8682379)
2. <https://link.springer.com/article/10.1007/s10479-021-04149-2>
3. <https://www.kaggle.com/datasets/computingvictor/transactions-fraud-datasets>
4. <https://www.geeksforgeeks.org/supervised-unsupervised-learning/>
5. <https://chat.openai.com>