# **Gab Pairs Trading Proposal**

**Method 1:**

Using Machine Learning (Clustering) Algorithm:

* Use **K-Means Clustering** or **Hierarchical** **Clustering** or **Affinity** **Propagation** **Clustering**

<https://algotrading101.com/learn/cluster-analysis-guide/>

* PCA then use **DBSCAN** or **OPTICS**



<https://hudsonthames.org/employing-machine-learning-for-trading-pairs-selection/>

<https://github.com/wangy8989/Pairs-Trading-with-Machine-Learning/>

**Method 2:**

Using Reinforcement Learning:

* Use **N-Armed** **Bandit**

<https://towardsdatascience.com/a-gentle-implementation-of-reinforcement-learning-in-pairs-trading-6cdf8533bced/>

<https://github.com/wai-i/Pair-Trading-Reinforcement-Learning/>