Foreign exchange rate forecasting through non-linear dynamical systems is becoming more and more relevant due to the nature of the data. Nearest Neighbor Algorithms which are among the most popular non-linear pattern recognition methods outperform the available linear forecasting methods when consider the high frequency foreign exchange data. In this work, we adapt cluster K-nearest neighbor, and probabilistic nearest neighbor algorithms for foreign exchange rate data. We compare the performances of these methods with the traditional methods, such as K-Nearest neighbor, transforming their forecasts in to a technical trading rule. (Received September 22, 2010)