

**Rule-based Fuzzy Network with Complimentary Learning System   
(RFN-CLS) for market climate prediction and analysis**

**Poon Sin Ta**

**School of Computer Science and Engineering**

**2020/2021**

Abstract

While the usage of Artificial Intelligence (AI) have brought successes to many industries and verticals, it is still not as widely adopted as it should have been especially in scenarios where critical decisions are made. One of the key reasons why AI is not accepted is due to its lack of transparency also known as the black box nature. This is a dilemma because it is the complexity of AI’s deep structure which yield highly accurate results that is also causing distrust in the people using it. Therefore, explainable AI should be a key focus to ensure its adoption in the most critical workload and use-cases which we often see in the financial market.

In the field of Compl