

Does Using CART Need to be Complex? Or, Exploiting the Predictive Structure of Financial Time Series in the Presence of Intermittent High Order Chaos
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The presence of Complexity in Financial Markets has been a perennial topic of interest between Scientists and Financiers since the birth of what was once known as Chaos Theory. We present CART as a statistical tool to explore Complex Systems: specifically, Financial Time Series Data. We investigate both the use of deliberately sparse CART trees as well as larger, more optimized trees to predict small movements in the financial markets. We also will compare CART predictions with other approaches using sophisticated Artificial Neural Networks, demonstrating the superiority of CART methodology. Finally, we will show how basic Risk Management strategies and Information Theory can be used to exploit even a minor predictive advantage for profit.