

Analysis of an Adaption of the Adaptive Aggressive Algorithm: Asking are AA Algorithms Actually All that Acurate in Applicable Auctions Anyway?

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The image displays a highly complex, fractal-like pattern constructed from dots and apostrophes. The pattern is dense and intricate, resembling a stylized tree or a branching structure. It features a central vertical axis with numerous horizontal branches extending outwards. The branches are composed of sequences of dots and apostrophes, creating a complex, self-similar appearance. The overall shape is roughly triangular, with the base being the widest and the top being the narrowest. The pattern is composed of many small, repeating units, giving it a textured, almost crystalline look. The use of dots and apostrophes as the primary building blocks adds to the visual complexity and suggests a digital or mathematical origin for the pattern.

1 Abstract

2 Introduction

Rupert

- What is automated trading (history)
- What our goal was

3 Environment

3.1 BSE

Jonny

- Limitations
- Restrictions (level of info — sealed bid double auction, dark pools? (http://en.wikipedia.org/wiki/Dark_liquidity, http://en.wikipedia.org/wiki/Algorithmic_trading#Strategies_that_only_pertain_to_dark_pools) etc.)

3.2 Traders

3.2.1 ZIP

Jonny

- What was significant — key points
- Advantages/disadvantages

3.2.2 GD-Variants

Rupert

- Shavers / Sniper / XKCD, etc.
- We implemented it but couldn't do a full implementation

3.3 Adaptive Aggressive Traders

3.3.1 Short term learning

Max

- Graphs — r vs price equilibrium

3.3.2 Long term learning

Max

- θ

3.3.3 Price estimation

Max

- Graph of all trades with projected price equilibrium
- **MEGA GRAPH**

4 Calibration

Group hug

- $\beta_1, \beta_2, \gamma, \eta$
- potential to compare statistically?

5 Results

Group hug

- Graph: Average balance over time
- Statistical **analysis** — why you used a certain test
Ed's report: "According to the conducted Wilcoxon-Mann-Whitney two-tailed rank-sum tests, the difference in the observed efficiencies is significant ($U = 2, N_1 = N_2 = 10, p < 0.0003$)."
- Experiment with changing scheduler
- Other graphs

6 Conclusion

Group hug

- Thank you and good night
- Hold for applause