

## Go!

### **Computer Science > Artificial Intelligence**

# **Price Trackers Inspired by Immune** Memory

William Wilson, Phil Birkin, Uwe Aickelin

(Submitted on 22 Apr 2010)

In this paper we outline initial concepts for an immune inspired algorithm to evaluate price time series data. The proposed solution evolves a short term pool of trackers dynamically through a process of proliferation and mutation, with each member attempting to map to trends in price movements. Successful trackers feed into a long term memory pool that can generalise across repeating trend patterns. Tests are performed to examine the algorithm's ability to successfully identify trends in a small data set. The influence of the long term memory pool is then examined. We find the algorithm is able to identify price trends presented successfully and efficiently.

Comments: 14 pages, 5 figures, 3 tables, 5th International Conference on

Artificial Immune Systems (ICARIS2006)

Subjects: Artificial Intelligence (cs.AI); Data Analysis, Statistics and

Probability (physics.data-an); Portfolio Management (q-fin.PM)

Journal reference: Proceedings of the 5th International Conference on Artificial Immune

Systems (ICARIS2006), Lecture Notes in Computer Science 4163,

p362-375, 2006

Cite as: arXiv:1004.3939v1 [cs.Al]

### Submission history

From: Uwe Aickelin [view email]

[v1] Thu, 22 Apr 2010 15:01:02 GMT (272kb)

Which authors of this paper are endorsers?

### **Download:**

PDF only

Current browse context:

cs.Al

< prev | next > new | recent | 1004

Change to browse by:

CS physics physics.data-an q-fin q-fin.PM

### References & Citations

NASA ADS

Bookmark(what is this?)









