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EVOLUTIONARY COMPUTATION
A PUBLICATION OF THE IEEE NEURAL NETWORKS SOCIETY

Special Issue on Evolutionary Computation for Finance and Economics

AIMS & SCOPE

Evolutionary Computation (EC) has become a successful methodology to solve financial and economic problems. It has been proven to be a powerful tool in domains where analytic solutions might not be a good alternative. As a result of this activity, there are several meetings and workshops that cover this subject. Some examples are: Special Sessions on Evolutionary Computation in Finance and Economics at the IEEE Congress on Evolutionary Computation (CEC); the Conference on Computational Intelligence in Economics and Finance (CIEF); and the Workshop on Economic Heterogeneous Interacting Agents (WEHIA). Besides, the Computational Finance and Economics Technical Committee (CFETC) of the Computational Intelligence Society (CIS) of the IEEE also supports this research field (http://ieee-cis.org/cf/).

So far, EC has been extensively applied to forecast financial time series, estimate econometric parameters, macroecomics models, price options, replicate laboratory results with human subjects, select equilibria, study the emergence of the representative agent and rational expectations, simulate artificial stock markets and social processes, explain the stylized facts observed in financial markets, design public policies, and so on. As we know, the problems in real world applications involve high complexity, noisy environments, imprecision, uncertainty and vagueness. For this reason EC techniques are needed in order to solve problems in the Financial and Economics areas.

The aim of this special issue is to provide a common forum to select and publish the most important research results in the area of advanced EC techniques applied to Finance and Economics. Papers on the application, design, and theory of EC, related to Finance and Economics are most welcome. We are soliciting submissions of original and significant contributions to this special issue.

AUTHORS & THEMES

Potential authors for this special issue should be researchers who are working with high quality EC techniques applied to Economics and Finance. All papers should present original research and innovative results. Themes of the submitted articles should include the use of EC in Economics and Finance, including (but not limited to) the following:

- Agent-Based Computational Economics
- Artificial Stock Markets
- Behavioral Finance
- Derivative Pricing
- Evolutionary Games and Industrial Organization
- Experimental Economics
- Macroeconomics
- Econometrics
- Microeconomic Behaviour
- Financial Data Mining
- Financial Engineering
- Financial Time Series Forecasting and Analysis
- Hedging Strategies
- Portfolio Management
- Term Structure Model
- Trading Strategies
- Simulation of Social Processes

Specific EC techniques include (but are not limited to):

- Evolution Strategies
- Evolutionary Programming
- Genetic Algorithms
- Associated methods of Genetic Programming and Classifier Systems.
- Hybrid Evolutionary Systems
- Swarm Intelligence
- Bio-inspired Algorithms
- Evolutionary artificial Neural Networks

SUBMISSIONS

***** BEFORE December 31, 2006 *****

Manuscripts should be prepared according to the instruction of the "Information for authors" section of the journal founded at (http://ieee-cis.org/pubs/tec/authors/) and submission should be done through the journal website: http://tevc-ieee.manuscriptcentral.com/ and **clearly mark "CFE Special Issue Paper"** as comments to the editor-in-chief.

Submitted papers will be reviewed by at least three different expert reviewers. Submission of a manuscript implies that it is the authors' original unpublished work and is not being submitted for possible publication elsewhere.

The review process will be driven by the Guest Editors of this Special Issue (Pedro Isasi, Edward Tsang) and by the Editor-in-Chief, Xin Yao. For any clarification please contact Pedro Isasi or Edward Tsang at the address below.

IMPORTANT DATES

The tentative schedule is as follows:

December 31, 2006:	Submissions deadline.
March 30, 2007:	Notification of the first review.
May 4, 2007:	Revisions due.
July 27, 2007:	Final notice of acceptance/reject
August 31, 2007:	Final manuscript.

The expected publication year of the special issue will be 2008.

Please pass it on to the interested colleagues in your department/institute, and accept our apologies if this information is not of interest to you.

Guest Editors

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