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**Advances in Computer Science** 

Editor Xiaodong Zhuang



# Advances in Computer Science

- Proceedings of the 15<sup>th</sup> International Conference on Evolutionary Computing (EC '15)
- Proceedings of the 6<sup>th</sup> European Conference of Computer Science (ECCS '15)

Rome, Italy, November 7-9, 2015



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#### Combining Genetic Algorithms with Software Agents as a Methodology to Simulate Financial Time Series



#### Professor Filippo Neri Dept. of Electrical Engineering and Computer Science University of Naples Federico II E-mail: filippo.neri@unina.it

**Abstract:** In the talk we will describe how GAs can be combined with software agents in order to produce a powerful and versatile simulation method to model and study complex systems, like financial markets. Examples of challenging real financial time series will be given and we will show how to use the simulation methodology offered by a variety of software agents optimized by a GA in order to model their characteristics. Experiments will also be described and discussed.

**Brief Biography of the Speaker:** Prof. Filippo Neri is currently with the Dept. of Electrical Engineering and Computer Science at University of Naples Federico II, Italy. Prof. Filippo Neri is currently Editor in Chief of WSEAS Transactions on Systems. Prof. Filippo Neri has wide experience in the area of artificial intelligence, machine learning, and software agent simulation. He had the opportunity to work both in academic and industrial environments including Ericsson's and Unlever's R&D centers and across three countries in the European Union (Italy, Ireland and UK). He has studied and visited at several important academic institutions including Carnegie Mellon University, Imperial College London, University of Milano, University of Torino, University of Malta. He is a Marie Curie Fellow and a ADI associate, the Italian PhD association. Finally he has served in the program committees and as reviewer at several international conferences and international journals.

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