CALL FOR PAPERS: OUANTITATIVE FINANCE

SPECIAL ISSUE ON **BIG DATA ANALYTICS: ALGORITHMIC TRADING AND FINANCIAL TEXT MINING**

Over the last fifteen years, computational intelligence applications have delivered many solutions to financial engineering problems, ushering in a new and fertile area of collaboration between the professional engineering and financial communities. Computational systems based on machine learning techniques have become important to many financial applications, from portfolio selection to proprietary trading and risk management. The new challenges for the financial community involve working with the abundance of data from a variety of sources that were not previously available and could now help solve financial problems proven previously hard to solve. Using sentiment data from news or social network streams and integrating them with financial time series data may benefit traders in running live simulations and could facilitate better decisions. Many tasks should now be tackled from the Big Data perspective and some financial services companies are implementing Big Data solutions. Understanding is growing that the ability to efficiently analyse and effectively exploit Big Data is critical, in order to develop advanced and sophisticated financial models which can be used to make informed real-time decisions. As the field is rapidly evolving, we need a new set of tools and methods to face the challenge posed by the availability of Big Data sets and the arrival of Big Data technologies. The plethora of techniques and hybrid approaches within the computational intelligence domain can provide an effective toolkit to address this challenge.

This special issue will seek to include papers on new methods in this area, in particular for analysing financial big data and developing high frequency trading systems.

IMPORTANT DATES:

| 1st June 2014 | - deadline for manuscript submission |
|--------------------|---|
| 1st September 2014 | notification to authors |
| 1st November 2014 | - deadline for submission of revised manuscripts |
| 1st December 2014 | – final decision |
| Early-Mid 2015 | - special issue publication in Quantitative Finance |

GUEST EDITORS:

Dietmar Maringer Antoaneta Serguieva Professor of Computational Management Science Senior Fellow, Financial Computing and Analytics Group Economics and Business Faculty University of Basel, Switzerland Chair IEEE CIS Computational Finance and Economics TC dietmar.maringer@unibas.ch a.serguieva@ucl.ac.uk

Vasile Palade Reader in Pervasive Computing Cogent Computing Applied Research Centre Coventry University, UK vasile.palade@coventry.ac.uk

Department of Computer Science, Univ. College London, UK

Jessica James

Head Quantitative Solutions Group, Commerzbank, London Visiting Professor, Financial Computing and Analytics Group Department of Computer Science, Univ. College London, UK jess@zetie.net