SCIENCE*SPRING*DAY

DEPARTAMENTO DE INFORMÁTICA

KDBI with Neural Networks

MultiModal Systems

CHi CENTER FOR INFORMATICS AND INFORMATION TECHNOLOGIES

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Nuno Marques is a Professor at FCT/UNL and researcher at CITI. He is also regularly cooperating with ISEGI and FCSH. His PhD thesis was pioneering in the introduction of Text Mining for the Portuguese language.

Objectives

Currently, Nuno Marques' work combines Machine Learning in Artificial Neural Networks and its application to real world problems. Since 2009, he has been developing Text and Data Mining concepts to apply to Financial Data Streams.

Nuno Marques is also involved in several research projects bringing together the university and private companies. Currently he is supervising of two PhD students and one master thesis.
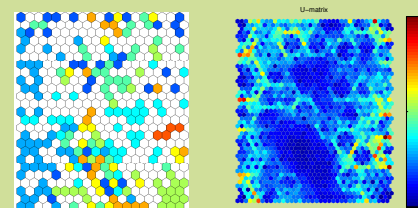

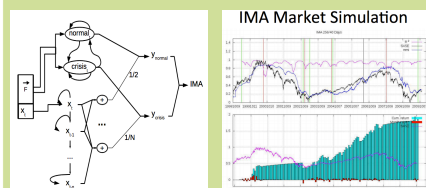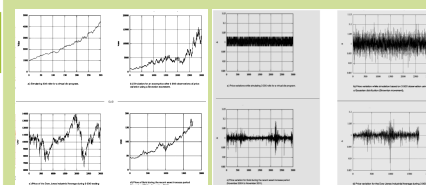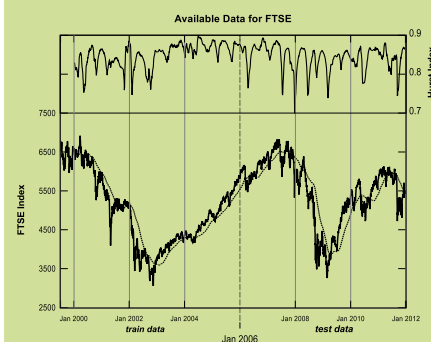Available Data for FTSE

Methodology

Project GoBusiness Finance (coordinator): an international project focused on the research of non-normal behaviours in financial markets and the development of tools to handle with unexpected events. The project focus the application of traditional technical measures such as moving averages, the Hurst coefficient, or Fama multipliers as devices to quantify non-normal market behaviours.

Project BestSupplier/Research (coordinator, QREN 18627/2011-02-11): aims to develop an internet platform for supplier ranking, by adding the advantages of collaborative electronic platforms and provides benchmarking services and business intelligence.

IMA Market Simulation

Expected Results

GoBusiness finance: This approach is carefully tested with the latest methods from Artificial Intelligence and Stream Data-Mining when applied to financial markets, complementing Artificial Neural Network optimisation with a Financial Expert System through Neuro-Symbolic integration techniques. Validation methods include simulations based in real data from major financial indexes, with statistics extending from normal to heavy-tail events.

BestSupplier KDBI Research: The platform supports the principles of quality management, allowing the involvement of various stakeholders, continuous improvement and development of mutually beneficial relationships between service providers and makers.