Martin Magris

PhD canditate at TUT

Project and funding:
Joined the **BigData finance EU** project on April 2016,
http://bigdatafinance.eu/

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 675044".

RP 8 (WP3):
Order Book Dynamics and Announcement Effects during Financial Crisis

Supervision:
Based at **Tampere University of Technology** (Tampere University from 2019),
In the «Finance» (DARE) researh group of **Prof. J. Kanniainen**

Research areas:
Implied volatility dynamics in relationship with jumps in the stock prices
Order book: ML applications, fractal properties, analytical models
Statistics/Econometrics: High frequency econometrics, Hawkes process, copulas

TAMPERE UNIVERSITY OF TECHNOLOGY

Publications:

Conference papers:
1. Implied volatility dynamics on presence of Jumps
2. Long-range Auto-correlations in Limit Order Book Markets: Inter- and Cross-event Analysis
3. Tensor Representation in High-Frequency Financial Data for Price Change Prediction

Submitted:
1. Benchmark Dataset for Mid-Price Prediction of Limit Order Book data
2. Single jumps in stock prices are related to multiple large movements in volatility

Working on:
1. Analytical models vs ML methods for the mid-pice movement predition in LOB
2. Fractal properties in LOB markets
3. HAR-copula model
4. Early signals in the order book before the flash crisis

Towards completion:
Secondment in CREATES (Aarhus university): GMM estimation of the Hawkes process
Complete course reuirements
Thesis as a collection of papers, possibly start the introduction by January 2019.