Intelligent systems and knowledge based applications

Vilnius University

Research group activities

- Developed new quantitative evaluation indicators and intelligent models for detecting anomalies in the flows of big financial data coming from heterogeneous sources;

- Evaluated the influence of market news, generated in various media and social information sources for stability of financial markets;

- Designed the advertising scenarios for E-shops surfers;

- Found the high performance computing solutions in micro structure of financial exchanges and high frequency trading environment;

- Discovered the logistic estimation of unsustainable economic situations, revealed the most important reasons of formation such situations enabling their recognition, anticipation and control.

Proposal

The research group could help to develop:

- New model for clustering e-shops clients and designing intelligent advertising scenarios;

- Big data value chain model;

- New business cases based on decentralized blockchain network enabling the development of transparent and trustworthy data bases of records.

Moreover, we would be glad to join activities in:

- Investigating the financial market actors' emotion influence on market efficiency;

- Finding the new methods for risk evaluation in enterprise level;

- Designing the Quality and Cost containment coherence framework for prudent modelling of innovative health care system;

- Developing, integrating, and implementing high frequency trading models in financial markets on high-performance computing platforms;

- Implementing smart contracts via online transactions and other peer-to-peer-based solutions for the sharing economy in online market places;

- Developing block chain or public ledger via peer-to-peer technology based solutions in autonomous decentralized organizations;

- Investigating and finding methods and models for valuation of Market Saturation.

Meet our team

Staff

Prof. Dr. **Dalia Krikščiūnienė**

Dr. **Darius Dilijonas**

Assist. Prof. Dr. **Vera Moskaliova**

Assoc. Prof. Dr. **Saulius Masteika**

Prof. Dr. **Virgilijus Sakalauskas**

Phd students

Laurynas Dovydaitis

Mantas Vaitonis

Marius Liutvinavičius

Konstantinas Korovkinas

Research outcomes

Most important publications

Some research was generalized in monographs „Intelligent models in marketing systems" (D.Kriksciuniene, V.Sakalauskas, 2014), „Economic Bubbles and Financial Pyramids. Logistic Analysis and Management" (S.Girdzijauskas, V.Moskaliova, D.Streimikiene, 2014) and number of papers published in prestigious international journals indexed by ISI WoS:

- Information sciences (V.Sakalauskas, 2016);

- Neurocomputing (D.Kriksciuniene, V.Sakalauskas, 2014);

- Transformations in business and economics (S.Masteika, M.Vaitonis, V.Sakalauskas, 2014);

- Information and Software Technologies (S.Masteika, M.Vaitonis, 2016);

- Journal of Business Economics and Management (S.Masteika, 2013);

- International Journal of General Systems (S.Masteika, 2015).

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