

# CALL FOR PAPERS

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JUNE 1ST 2022

## APPLICATIONS OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN BUSINESS, FINANCE AND ECONOMICS



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Special Issue Information &  
Submission Guidelines

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**REGE - Revista de Gestão** is pleased to invite papers for a Special Issue on "Applications of Artificial Intelligence and Machine Learning in Business, Finance and Economics". This Special Issue will accept articles mainly on the following but non-exhausting lists of topics:

#### 1. Computational Intelligence Models in Business, Finance and Management:

- Machine Learning and Big Data;
- Neural Networks and Deep Learning;
- Agent Based Modeling and Simulation;
- Time Series Analysis and Forecasting;
- Evolutionary Computation and Optimization;
- Adaptive Modeling;
- Cognitive Systems.

#### 2. Application in Finance, Business and Management:

- Asset allocation;
- Trading systems;
- Algorithmic trading;
- Risk management;
- Pricing;
- Behavioral finance;
- Financial forecasting;
- Energy and electricity markets;
- Business analytics;
- Recommender systems;
- E-commerce;
- Advertising and marketing;
- Crowds and market models;
- Demand forecasting;
- Distribution and supply chain.



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REGE - Revista de Gestão****Special Issue  
Applications of Artificial Intelligence and Machine Learning in  
Business, Finance and Economics****Overview of the Theme**

Artificial intelligence (AI) is the simulation of intelligence by machines. Machine Learning (ML) is a branch of AI that focuses on the use of data by algorithms to learn and extract valuable information to enable problem-solving and decision-making. In finance, economics, and business decisions, AI and ML provide a key infrastructure to solve many everyday life and strategic issues of companies in domains such as supply-chain management, asset allocation, logistics management, inventory monitoring, transportation routing, quality monitoring, sales and marketing, managerial accounting, risk assessment, cash flows forecast, sustainability decisions etc. A wide range of AI and ML learning algorithms have been successfully applied in managerial problems. Examples include Neural Networks and Deep Learning, Reinforcement Learning, Support Vector Machines, Fuzzy Inference Systems, Evolutionary Computation, Decision Trees, Boosted Trees, K-Nearest Neighbor Methods.

Contemporary AI and ML algorithms essentially are data-driven modeling (DDM) tools. Currently many firms, regardless of their business nature, use AI and ML tools to support decision-making. Their impact in quality of services, productivity,

efficiency, effectiveness of marketing strategies, etc. have been enormous. With the increasing availability of data brought by the low computational and advanced data acquisition and storage costs, AI and ML approaches became the technology of choice for automating repetitive tasks, to extract hidden patterns in the data, to process images, and to predict extreme events.

Despite the growing interest in AI and ML techniques by many companies, challenges remain in well-known situations and several potential applications of DDM. Business, financial and economic relations are diverse and produce large amounts of data in real time. Intelligent data processing and modeling with AI and ML have the ability to find valuable information (knowledge and meaning) for product, policy, strategic, and many other firm decisions. In addition to the impressive and promising achievements of AI and ML in managerial domains, there is still a challenge in the construction of explainable business and decision models, in terms of their structure and semantics, to justify a trustworthy acceptance.

In this context, the Special Issue focuses on methodology and applications of AI and ML models in business, finance and management. The goal is to encourage original research work, novel developments, and innovative ways to use data analysis and learning methods to practical decisions in managerial tasks.

### **Topics of Interest**

The REGE Special Issue on Applications of Artificial Intelligence and Machine Learning on Business, Finance and Management welcomes submissions in the following (but not limited to) topics:

1. Computational Intelligence Models in Business, Finance and Management:
  - a. Machine Learning and Big Data;
  - b. Neural Networks and Deep Learning;
  - c. Agent Based Modeling and Simulation;
  - d. Time Series Analysis and Forecasting;
  - e. Evolutionary Computation and Optimization;
  - f. Adaptive Modeling;
  - g. Cognitive Systems.
2. Application in Finance, Business and Management:
  - a. Asset allocation;
  - b. Trading systems;
  - c. Algorithmic trading;
  - d. Risk management;
  - e. Pricing;
  - f. Behavioral finance;

- g. Financial forecasting;
- h. Energy and electricity markets;
- i. Business analytics;
- j. Recommender systems;
- k. E-commerce;
- l. Advertising and marketing;
- m. Crowds and market models;
- n. Demand forecasting;
- o. Distribution and supply chain.

## **Publication Guidelines**

**Manuscripts: max. 7,000 words**

**Submissions due: June 1, 2022**

**Final revised manuscript due: January, 2023**

**Publication: April, 2023**

## **Further Information**

Authors should prepare their manuscript according to the Manuscript Requirements available from the online submission page of the REGE at <https://www.emeraldgrouppublishing.com/journal/rege#author-guidelines>. All papers will be peer-reviewed following the REGE reviewing procedures.

Submissions to REGE must be made through ScholarOne Manuscripts, the online submission and peer review system. Registration and access are available at <https://mc.manuscriptcentral.com/rege>.

For further information regarding our special issue, please do not hesitate to contact us! Please send an email to [rege@usp.br](mailto:rege@usp.br) with the subject title "Special Issue".

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