**Call for Papers**

# Journal of Universal Computer Science (J.UCS) Special Issue:

## Advances and Practical Applications of Deep and Shallow Machine Learning

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## Background & Call for Manuscripts

Machine learning algorithms, solutions and techniques have been successfully used in a variety of domains to help humans make better decisions and analyze the data. Machine learning still requires work on security, fairness, explainability and assurance of fundamental rights and ethical foundations. Nonetheless, current challenges still motivate further improvement and scientific efforts. While deep learning has been a focus in recent times, fueled by abundance of available computational resources, also shallow learning keeps its applications and faces above challenges.

Therefore machine learning in both flavors and its practical applications are a key, important and common topics discussed at IP&C, CORES and ACS conferences which decided to held a joint multi-congress in 2021, and also organize this special issue.

Therefore, the special issue intends to cover recent solutions to the abovementioned problems, novel methods and algorithms, advances, challenges, as well as practical applications of machine learning, especially in computer recognition systems.

We cordially invite prospective authors to submit original papers on the following topics (list is not exhaustive):

- Machine learning methods applied to image processing, networks, language processing and other novel applications
- Biometric human identification
- Machine learning for image processing and telecommunications
- Deep learning and data mining applied to pattern recognition and computer recognition systems
- Bio-inspired solutions for detection, recognition and security applications
- Solutions to current emerging problems in image processing and telecommunications
- Explainability of ML solutions
- Secure and adversarial ML
- Practical applications of ML, case studies, evaluations
- ML for text processing, NLP and fake news detection
- ML applied to stream processing
- Advancements in classifiers
- Fairness in ML/AI

**Deadlines:**

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| Submission by: | 4th November 2021 |
| Notification of authors by: | 30th January 2022 |
| Revised submission by: | 15th March 2022 |
| Notification about final decision by: | 30th April 2022 |

**Submission and Evaluation Procedure**

The Journal of Universal Computer Science is a high-quality electronic publication that deals with all aspects of computer science. J.UCS has been appearing monthly since 1995 and is thus one of the oldest electronic journals with uninterrupted publication since its foundation. A number of special issues as well as the printed archive editions of the volumes are also available in print and can be ordered directly from J.UCS office.

Manuscripts must be submitted in PDF format, written in English and should not exceed 20 pages. Papers only prepared according to the JUCS's guidelines for authors and submitted online (see procedure described below) will be included in the review process. Illustrations and tables must be provided as integrated parts of the manuscript. The guidelines for authors are available at

http://www.jucs.org/ujs/jucs/info/submissions/style_guide.html.

Please, bear in mind, that the extended version of papers originally presented at a conference or workshop must contain about 50% new material and the title of the extended version must clearly and unmistakably differ from the title of the article presented at the conference.

Only novel research papers which are currently not under review at another event or a journal are accepted for the review process. For more details, please also refer to

http://www.jucs.org/ujs/jucs/info/special_issues/special_guidelines.html.

Each paper will be blind reviewed by at least 3 reviewers. According to the covered main subjects in the content, a selected set of reviewers with the appropriate expertise will be assigned.