



Federated and Transfer Learning Applications

Guest Editors:

Dr. George Drosatos

Institute for Language and
Speech Processing, Athena
Research Centre, Kimmeria
University Campus, 67100 Xanthi,
Greece

Prof. Dr. Pavlos S. Efraimidis

Department of Electrical and
Computer Engineering,
Democritus University of Thrace,
67100 Xanthi, Greece

Prof. Dr. Avi Arampatzis

Department of Electrical and
Computer Engineering,
Democritus University of Thrace,
67100 Xanthi, Greece

Deadline for manuscript
submissions:

closed (20 March 2023)

Message from the Guest Editors

In this Special Issue, we seek research and case studies that demonstrate the application of federated and transfer learning approaches to support applied scientific research, in any area of science and technology. Example topics include (but are not limited to) the following:

- Federated Learning (FL) Applications.
- Distributed Learning Approaches.
- Privacy-Preserving Techniques in FL.
- Homomorphic Encryption Approaches in FL.
- Differential Privacy Approaches in FL.
- Incentive Mechanisms in FL.
- Interpretability in FL.
- FL with Unbalanced Data.
- Selection of Appropriate FL Aggregation Function per Application.
- Transfer Learning (TL) Applications.
- Pre-Trained Models.
- BERT-Like Models.
- Federated Transfer Learning Approaches.
- Applications of FL and TL in Biomedical Domain.
- Applications of FL and TL in Cybersecurity.
- Applications of FL and TL in Natural Language Processing.
- Applications of FL and TL in Social Network Analysis.
- Graph-based FL and TL.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)