Special Issue

Transfer Learning: Techniques and Applications

Message from the Guest Editors

This Special Issue aims to compile recent advances in transfer learning, including novel methods, theoretical foundations, and practical applications. Topics of interest include, but are not limited to, the following:

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- Novel methods and theoretical frameworks for transfer learning and domain adaptation.
- Novel pre-training strategies (e.g., self-supervised, supervised, domain-specific) and their impact on downstream tasks.
- Novel methods for cross-domain, cross-task and cross-modal transfer learning.
- Techniques for dealing with domain shift, catastrophic forgetting, and negative transfer.
- Transfer learning across different data modalities (e.g., vision, text, speech, graphs, time series) or structures.
- Applications of transfer learning to solve real-world challenges (e.g., simulation to reality, medical image analysis, robotics, autonomous systems, computer vision, engineering and Industry 4.0).
- Empirical investigations and benchmarks comparing different transfer learning approaches.
- Investigations into the robustness, fairness, and limitations of transfer learning methods.
- Efficient adaptation methods for large foundation models and LLMs.

Guest Editors

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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.

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