

## Special Issue

# Regularization Techniques for Machine Learning and Their Applications

### Message from the Guest Editors

Regularization is probably the key to address the challenging problem of overfitting, which usually occurs in high-dimensional learning. Its primary goal is to make the machine learning algorithm “learn” and not “memorize” by penalizing the algorithm to reduce its generalization error in order to avoid the risk of overfitting. As a result, the variance of the model is significantly reduced, without substantial increase in its bias and without losing any important properties in the data. The main aim of this Special Issue is to present the recent advances related to all kinds of regularization methodologies and investigations of the impact of their application to a diversity of real-world problems.

- Regularized neural networks
- Dropout & Dropconnect techniques
- Regularization for deep learning models
- Weight-constrained neural networks
- L-norm regularization
- Adversarial learning
- Penalty functions
- Multitask learning
- Pooling techniques
- Model selection techniques
- Matrix regularizers
- Data augmentation
- Early stopping strategies

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### Guest Editors

Prof. Dr. Theodore Kotsilieris

Dr. Ioannis E. Livieris

Prof. Dr. Ioannis Anagnostopoulos

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### Deadline for manuscript submissions

closed (31 December 2021)



## Electronics

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*Electronics*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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### Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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