# **Special Issue**

## Deep Learning Techniques Addressing Data Scarcity

### Message from the Guest Editors

This Special Issue aims to present novel works proposing new tools and techniques to deal with data scarcity in several research areas, including different transfer learning types, physics-informed neural networks, generative adversarial networks, deep synthetic minority oversampling techniques, and model complexity. High-quality reviews and survey papers are welcome. Papers may focus on, but are limited to, the following areas:

- Deep learning;
- Data scarcity;
- Machine learning;
- Convolutional neural network (CNN);
- Deep neural network architectures;
- Lack of training data;
- Small datasets;
- Transfer learning;
- Physics-informed neural network;
- Generative adversarial networks;
- Deep synthetic minority oversampling technique;
- Model complexity;
- Deep learning applications;
- Image classification;
- Image segmentation;
- Image registration;
- Supervised learning;
- Unsupervised learning;
- Hardware solutions;
- Overfitting;
- Imbalanced data.

### **Guest Editors**

#### Dr. Laith Alzubaid

School of Mechanical, Medical, and Process Engineering The Queensland University of Technology, Brisbane, QLD 4000, Australia

#### Prof. Dr. YuanTong Gu

School of Mechanical, Medical, and Process Engineering, The Queensland University of Technology, Brisbane, QLD 4000, Australia

### Deadline for manuscript submissions

closed (31 October 2024)



## Future Internet

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 8.3



mdpi.com/si/125103

Future Internet Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 futureinternet@mdpi.com

mdpi.com/journal/ futureinternet





# Future Internet

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 8.3



futureinternet



## About the Journal

### Message from the Editor-in-Chief

*Future Internet* is a fast-growing journal devoted to rapid publications of the latest results in the general areas of computer networking/communications and information systems, with a focus on the Internet of Things, big data and augmented intelligence, smart systems (in terms of technologies, architectures, and applications), network virtualization, edge/fog computing, and cybersecurity. Both theoretical and experimental papers are welcome. Every year, *Future Internet* also features Special Issues dedicated to specific topics within the journal's scope.

### Editor-in-Chief

Prof. Dr. Gianluigi Ferrari Department of Engineering and Architecture, University of Parma, Parco Area delle Scienze, 181/A, 43124 Parma, Italy

### Author Benefits

### **Open Access:**

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

### **High Visibility:**

indexed within Scopus, ESCI (Web of Science), Ei Compendex, dblp, Inspec, and other databases.

### Journal Rank:

JCR - Q2 (Computer Science, Information Systems) / CiteScore - Q1 (Computer Networks and Communications)