



an Open Access Journal by MDPI

# Electroencephalography (EEG) in Assessment of Engagement and Workload

Guest Editors:

### Dr. Yelena Tonoyan

Rehab Technologies Lab, Istituto Italiano di Tecnologia, Via Morego 30, 16163 Genoa, Italy

#### Dr. Giacinto Barresi

Rehab Technologies Lab, Istituto Italiano di Tecnologia, Via Morego, 30, 16163 Genoa, Italy

#### Prof. Dr. Honglin Hu

University of Chinese Academy of Sciences, Beijing, China

Deadline for manuscript submissions:

20 November 2024

# **Message from the Guest Editors**

Being an agent in a variety of complex systems, a human puts mental and attentional efforts into providing efficiency to the operational environment, as occurs in risky professional activities like surgeries. This also occurs when an individual with motor impairments controls assistive or rehabilitative devices based on brain-computer interfaces (BCIs) or robotic systems (like exoskeletons and prosthetic limbs). In such contexts, it becomes crucially important to investigate how humans perceive the difficulty of performing demanding tasks. Within this domain, the concepts of engagement and mental workload play a fundamental role in understanding the user experience and the human-system performance, as pondered in several studies of cognitive ergonomics and neuroeconomics. Furthermore, electroencephalography (EEG) can offer impactful indices and biomarkers for the assessment of engagement and mental workload during task performance. This Special Issue is intended to act as a contributor to this theme. Research areas may include (but are not limited to) the following:

- electroencephalography (EEG)
- mental workload
- engagement
- brain-computer interface (BCI)











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 - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

#### **Contact Us**