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Electroencephalography (EEG) in Assessment of Engagement and Workload

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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)



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Special Issue



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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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