

EINLADUNG

zum Vortrag von

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zum Thema

Towards Neuroadaptive Technology: An outlook on the potential impact of Passive Brain- Computer Interfaces on Technology, Neuroscience and Society.

Passive Brain-Computer Interfaces (pBCIs) can assess information about changes in cognitive and affective state in real time and convey an interpretation of these states as implicit commands to a machine. The machine can then automatically adapt its own state to support a given task in the Human-Machine System. Furthermore, by collating information about the user state with the task-specific context and using methods from machine learning and artificial intelligence a user model can be generated that even reflects correlates of higher cognition. The resulting *Neuroadaptive Technology* leads to a convergence of human and machine intelligence and enables a fundamentally new way of interaction with technology.

In my talk I will provide an overview of recent developments in pBCI and Neuroadaptive Technology. Furthermore, I will discuss insights about how we can elaborate our understanding of human neuroscience by interpreting pBCI methods. By combining statistical machine learning with Independent Component Analysis, task-specific cortical sources and related single-trial activity can be identified directly from the used classification approach.

The approaches discussed have the potential to change the way we are affected by our interaction with technology and to redefine privacy, as machines automatically gain access to private information potentially without our consent or even without our awareness. I will discuss resulting ethical considerations in the conclusion of my talk.

Freitag, 16.11.2018, 14:00 – 16:00 Uhr
BTU Cottbus – Senftenberg, LG 3A, R. 325

Alle Interessenten sind herzlich eingeladen!