Brain & Neurological Disorders

NAME OF LABORATORY: Lab for immersive brain-computer interfaces

PI: Dr. Gal Raz PhD

Director of Department: Prof. Talma Hendler MD, PhD

Research Objectives: Basic research and development of methods involving audiovisual brain computer interfaces, virtual reality, and augmented reality for psychiatry, rehabilitation, and enhancement. The lab focuses on translational research, which integrates these technologies in treating psychopathologies such as depression, anxiety, addiction, cognitive rehabilitation, and learning. The work in the lab is based on neuroimaging methods including encephalography (EEG), functional magnetic resonance imaging (fMRI) and Functional near-infrared spectroscopy (fNIRS)

Main Research topics: Brain-Computer Interfaces, Virtual Reality, Augmented Reality, Cognitive rehabilitation, learning.

Staff: Gal Raz PhD, Moran Ovedia, Ayam Greental, Gilan Jackont

Active Grants:

- BIAL foundation Grant 299/14
- BRAINTRAIN under the EU FP7 Health Cooperation Work Program (602186)
- T2URBO Ministry of Science, Technology and Space

Collaborations:

- Steve Tisch School of Film and Television, Tel Aviv University
- Faculty of Psychology and Neuroscience, Maastricht University
- Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen
- School of Engineering and Digital Arts, University of Kent
- IBM

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