EEG Electroencephalography

BIOPAC® Systems, Inc.

Application Description

BIOPAC® provides a wide range of tools for recording, displaying, and analyzing surface EEG (sEEG) and implanted EEG signals from human and animal subjects. BIOPAC® offers a number of hardware solutions that allow you to record from a single channel of EEG and up to 32 channels of wireless and logged data. There are also hardware options available for full-band EEG (FbEEG) recordings with bandwidths from DC to hundreds of Hz. EEG Systems are available for in lab recordings, real-world applications, small animal wireless recordings, and MRI applications. Advanced real-time analysis options provide metrics for subject engagement, workload and drowsiness.

Advanced Features

- Seizure Detection
- Automated EEG Analysis
- Wireless EEG and Cognitive State Analysis
- EEG Remove EOG Noise
- Stimulus Presentation Event
- And More

Watch Automated Analysis Video Tutorials at the BIOPAC Website!

Selected Research Citations Below

Search online for more than 5,440 BIOPAC citations for EEG: Electroencephalography

Design of EEG Based Wheel Chair by Using Color Stimuli and Rhythm Analysis

Nafian Hasan, et al (2019). 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT)

Heart and Brain Responses to Real Versus Simulated Chess Games in Trained Chess Players: A Quantitative EEG and HRV Study

Juan Pedro Fuentes-Garcia., et al (2019). International Journal of Environmental Research and Public Health

An Approach of Human Emotional States Classification and Modeling from EEG

Monira Islam, et al (2019). International Journal of Computer Science and Security (IJCSS), Volume 13, Issue 3

A Wearable In-Ear EEG Device for Emotion Monitoring

Chanavit Athavipach, et al (2019). MDPI Journal-Sensors, Vol 19, Issue 18

Individual EEG Asymmetry as a Predictor of Hydration Status During Exercise in the Heat

Ayano Katsayama (2019). SFA Scholarworks, Stephen F. Austin State University, Electronic Thesis and Dissertation 247

EEG Responses to Incremental Self-paced Cycling Exercise in Young and Middle Aged Adults

Rachel M. Maceri, et al (2019). International Journal of Exercise Science, Vol 12, Issue 3

EEG profiles during general anesthesia in children: A comparative study between sevoflurane and propofol

Agnes Rigouzzo, et al (2019). Pediatric Anesthesia, Vol 29, Issue 3

Cardiac and Brain Activity Correlation Analysis Using Electrocardiogram and Electroencephalogram Signals

Robert Kerwin C. Billones et al (2019). De La Salle University, Mania Phillipines

Driving Style Recognition Based on Electroencephalography Data From a Simulated Driving Experiment

Fuwu Yan, et al (2019). Frontiers in Psychology-Performance Science

Adding immersive virtual reality to a science lab simulation causes more presence but less learning

Guido Makransky, et al (2019). Learning and Instruction Journal, Vol 60