

ANALISIS VISUALISASI DATA TEORI

SUMMARY



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Tugas Kuliah Tamu

“Affective Computing: What emotion is telling us” by Associate Prof. Dr. Norhaslinda
Kamaruddin

Brain consists of billion of cells, half of which are neurons, half of which help and facilitate the activity of neurons. Any Synaptic activity generates a subtle electrical impulse referred to reliably detect without direct contact with it. Eventually, it can be measured on the head surface.

Electroencephalogram (EEG)

Electroencephalogram is the physiological method of choice to record the electrical activity generated by the brain via electrodes placed on the scalp surface.

Why EEG?

1. EEG has very high time resolution and captures cognitive processes in the time frame in which cognition occurs.
2. EEG directly measures neural activity
3. EEG is inexpensive, lightweight, and portable
4. EEG monitors cognitive affective processing in absence of behavioral responses

EEG Signals

1. Sensors that are placed on scalp is called electrode
2. Applied to human in 1920 by Hans Berger, an German Neurologist
3. Since electrical signal are very small, the recorded data is digitized and sent to an amplifier
4. The amplified data are displayed as a time series of voltage values

EEG Electrodes : Under optimal condition, the skin, the electrode and the electrode gel function as capacitor and attenuate the transmission of low frequencies