

Sztuczna Inteligencja

Interfejsy Mózg-Komputer (BCI)



Włodzisław Duch

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Google: Włodzisław Duch

Co było



- Teorie poznania
- Systemy oparte na wiedzy
- Modele kognitywne
- SOAR
- ACT
- Cog

Co będzie



- Interpretacja stanów mózgu (brain reading)
 - MVPA, Multivariate analysis of fMRI data
 - Reconstructing visual stimuli
 - Auditory reconstruction
 - Object representation
- Semantics of sentences, decoding of semantic information
- Decoding memories
- Lie detectors

Co będzie



- Mózg \Leftrightarrow komputer, czyli Brain-Machine Interfaces (BCI/BMI)!
- BMI history
 - Motor-related electrical brain activity
 - Implanted electrodes for motor control
 - EEG for communication
 - Auditory reconstruction
 - Object representation
 - Semantics of sentences, decoding of semantic information
 - Decoding memories
 - Lie detectors

Na zakończenie

Why are we confident that machines will pass Turing test ...

—Rodney Brooks, director of the MIT AI Lab

There's this stupid myth out there that A.I. has failed, but A.I. is everywhere around you every second of the day. People just don't notice it. You've got A.I. systems in cars, tuning the parameters of the fuel injection systems. When you land in an airplane, your gate gets chosen by an A.I. scheduling system. Every time you use a piece of Microsoft software, you've got an A.I. system trying to figure out what you're doing, like writing a letter, and it does a pretty damned good job. Every time you see a movie with computer-generated characters, they're all little A.I. characters behaving as a group. Every time you play a video game, you're playing against an A.I. system.

[Machine Learning and Creativity](#) (wykład mniej techniczny).

[AI Links](#) wiele ciekawostek.

Przykładowe pytania

- Jakie mamy klasy metod uczenia maszynowego?
- Na czym polega ML?
- Przedstawić algorytm drzew decyzji, jakie granice tworzy?
- Etapy data mining
- Jaką metodę uczenia maszynowego warto stosować w sytuacji ...