

A method for measuring trust and attractiveness of presented faces based on brain activity measurements and machine learning

Abstract

Social trust is the confidence that other people, groups or institutions will act fairly, responsibly and as expected. It is the belief that other people will treat us with respect and fairness, and will abide by the rules and norms that govern social interactions. Trust is one of the most important qualities that determines the success of further interpersonal relationships. Deeming someone trustworthy or untrustworthy depends on many factors. When judging others, people are most often attentive to their face and general appearance. A lot of important information can be read from one's face to identify a person and determine his or her traits. The study investigated whether the evaluator's personality traits matter for judging another person based on his or her face alone. It was examined which brain areas are most relevant when making a trust decision. The logistic regression model used obtained results in excess of 70 %, therefore, it can be concluded that it is able to indicate with high probability the correct trust/distrust decision based on brain activity.