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An emotion, verbal skill and eye contact detection system to help children with autism.

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Abstract

Autism Spectrum Disorders (ASDs) are a complex, pervasive and multi-factor neuro-developmental condition that affects one from every 68 children.

Scientific research has demonstrated the effectiveness of using technologies to improve communication and social skills of autistic children. The use of software systems such as mobile and multimedia apps increases the interest of autistic children in learning while playing. This article presents an Android mobile app called YING, which has facial recognition and enhanced emotions. This mobile app complements the traditional therapeutic approaches available for the social interaction of autistic children, such as Applied Behavior Analysis¹ (ABA). Currently, Autism Spectrum Disorder (ASD), affects a significant number of people who have difficulty communicating and socializing, leading to problems in learning. YING uses various computer technologies to enhance social behavior and verbal communication skills of autistic children. An experiment that demonstrates the effectiveness of using YING has been performed and the results are presented in this article.

Studies have examined the use of technology and computer-based interventions to teach language and social skills to people with ASD. In particular, students in the autism spectrum enjoy playing games, which provide a safe environment. Therefore, we reviewed the literature on the relationship between technology, games, user experience², access, and training³ and skills development⁴ of people with ASD in this article

1) APPLIED BEHAVIOR ANALYSIS(ABA)

2) USER EXPERIENCE

3) EDUCATION

4) SKILL DEVELOPMENT

Keywords:

Human Computer Interaction¹(HCI), games, mobile applications, autism, autism spectrum disorder, media, communication skills² Face recognition³, Emotion recognition⁴Several,

1) HUMAN COMPUTER INTERACTION(HCI)

2) COMMUNICATION SKILLS

3)FACIAL RECOGNITION

4)EMOTION RECOGNITION