

Project #3

ARGUS-MDS-ASD: Digital phenotyping for social communication behaviors

Description

We are studying a computerized, machine learning system to monitor multiple social communication behaviors in individuals with ASD and non-autism NDDs (such as ADHD, And intellectual disability without ASD). The system utilizes smart glasses, standard cameras, and machine learning software to automatically detect important social communication behaviors including eye gaze, gestures, facial expressions, and speech with a minimally intrusive system (i.e. no sensors or devices worn by children or adult participants, except the clinician). Our current focus is to establish psychometric properties of our technology platform ARGUS-MDSASD and provide data on its accuracy to measure quantitative properties of behaviors in early childhood and school-aged children.

Mentor

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