Intelligent autism screening using fuzzy agent

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ABSTRACT
In the diagnosis of diseases, either physical or psychological, there are situations causing reaching for second independent opinion very hard. This is especially true in the diagnosis of Autism due to the complex process of diagnosis. Apart from the complex process, the challenges include cost and the availability of experts. This, however, does not change the fact that having regular independent second opinions is crucial. Hence, this study proposes an intelligent autism screening model using fuzzy agent, to assist the expert and non-expert in making the diagnosis. In this study, the fuzzy inputs are assigned based on five categories, which are Communication, Gross Motor, Fine Motor, Problem Solving, and Personal Social, and is specifically for three-year-old children only. The proposed model will be able to produce output in the form of sequences based on lowest to highest mark of the scores for each category. This output will then relate to the suggestion of activities to autistic children by priority (based on the scores obtained).

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