

## LITERATURE REVIEW ON APPLYING MACHINE LEARNING TECHNIQUES TO DIAGNOSE AUTISM SPECTRUM DISORDER (ASD)

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## **ABSTRACT**

Clinical decision support systems are computer based automated systems developed with the aid of AI and ML for supporting and improving the accuracy of clinical decision-making processes. These systems are used by clinicians in making diagnostic decisions and treatment plans. It is able to simulate expertise and express logical reasoning for making assertions. Many inexperienced clinicians are not well confident in certain autistic cases because their observed diagnosis and the calculated grade may not be always similar. Availability of diagnostic experts to provide clinical expertise is also a problem in the diagnosis of autism children. Hence, there is a need of a computer assist system comprised of experience and skill of a clinician, which can advance the power of existing diagnostic method. The computer-assisted system will help to confirm the assessment decisions of clinicians. Research works about the application of machine learning techniques for the development of autism assessment and grading in this area is very much required. This work proposes an approach which uses machine learning techniques for autism grading.

**KEYWORDS:** Machine Learning, Autism Spectrum Disorder

Article History Received: 21 Apr 2020 | Revised: 04 May 2020 | Accepted: 05 May 2020