Year of Publish	Title	Methodology	Link
2024	Advancing autism prediction through visual-based AI approaches: integrating advanced eye movement analysis and shape recognition with Kalman filtering	The present study proposes an economical eye movement analysis system that adroitly integrates Neuro SpectrumNet (NSN) techniques with Kalman filtering, enabling precise eye position estimation. The overarching objective is to enhancedeep learning models for early autism detection by leveraging eye-tracking data, a critical consideration given the pivotal roleof early intervention in mitigating the disorder's impact. Through the synergistic incorporation of NSN and contrast-limitedadaptive histogram equalization for feature extraction, the proposed model exhibits superior scalability and accuracy whencompared to existing methodologies, thereby holding promising potential for clinical applications	https://www.researchgate.net/publication/326965445_Applying_Eye_Tracking_to_Identify_Autism_Spectrum_Disorder_in_Children
2024	Using Machine Learning to Diagnose Autism Based on EyeTracking Technology	ResNet, CNN, ANN, MobileNet(highest acc: 96%)	https://www.researchgate.net/publication/387646585_Using_Machine_Learning_to_Diagnose_Autism_Based_on_Eye_Tracking_Technology
-	The visualization eye tracking scanpaths imagesdataset contains 547 images. Specifically,328 images for the non-ASD participants, and219 images for ASD-diagnosed. The dataset wasaugmented with an additional 2735 samples,where five synthetic images were generated foreach visualization. (PDF) Using Machine Learning to Diagnose Autism Based on Eye Tracking Technology. Available from: https://www.researchgate.net/publication/387646585_Using_Machine_Learning_to_Diagnose_Autism_Based_on_Eye_Tracking_Technology [accessed Jul 01 2025].	ANN(ASD diagnosis: Accuracy= 90% Recognize autismscores: Accuracy = 83%)	-
-	Eye tracking data from face-to-face conversations,where 20 children with TD and 19 childrenwith ASD	SVMAccuracy = 92.31%Specificity = 100%Sensitivity = 8	-
-	The visualization eye tracking scanpaths imagesdataset contains 547 images. Specifically,328 images for the non-ASD participants, and219 images for ASD-diagnosed (PDF) Using Machine Learning to Diagnose Autism Based on Eye Tracking Technology. Available from: https://www.researchgate.net/publication/387646585_Using_Machine_Learning_to_Diagnose_Autism_Based_on_Eye_Tracking_Technology [accessed Jul 01 2025].	MLPAccuracy = 87%Sensitivity = 88%Specificity = 69%	-
-	The scan path images contain 547 images (328 fornon-ASD and 219 for ASD), the dataset wasaugmented with an additional 2735 samples.	CNN Acc: 90% Sensitivity:83%Precision: 80%	-
-	Eye gaze data represented by eye trackingparadigm in a virtual environment. 55 childrenparticipated, where 20 TD children and35 ASD children.	SVM Accuracy = 86%Sensitivity = 91%	-
-	mages of children	SVM Accuracy = 89%	-
-	The visualization eye tracking scanpaths imagesdataset contains 547 images. Specifically,328 images for the non-ASD participants, and219 images for ASD-diagnosed. The dataset wasaugmented with an additional 2566 samples,1519 images for the non-ASD participants and1041 images for ASD-diagnosed. (PDF) Using Machine Learning to Diagnose Autism Based on Eye Tracking Technology. Available from: https://www.researchgate.net/publication/387646585_Using_Machine_Learning_to_Diagnose_Autism_Based_on_Eye_Tracking_Technology [accessed Jul 01 2025].	DNN Sensitivity = 93.28%Specificity = 91.38%	-

Year of Publish	Title	Methodology	Link
-	Used the Fixation maps dataset contains 300 ASDfixation maps and 300 TD fixation maps	CNN Accuracy = 75.23%	-
-	The visualization eye tracking scanpaths imagesdataset contains 547 images. Specifically,328 images for the non-ASD participants and219 images for ASD-diagnosed. The dataset wasaugmented, 1834 images for the non-ASD(training and validation) and 1750 images forASD-diagnosed (training and validation). (PDF) Using Machine Learning to Diagnose Autism Based on Eye Tracking Technology. Available from: https://www.researchgate.net/publication/387646585_Using_Machine_Learning_to_Diagnose_Autism_Based_on_Eye_Tracking_Technology [accessed Jul 01 2025].	ResNet18Accuracy = 97.6%Precision= 97.5%Sensitivity	-
2022	Investigation of Eye-Tracking Scan Path as a Biomarker for Autism Screening Using Machine Learning Algorithms	DNN	https://www.researchgate.net/publication/358706686_Investigation_of_Eye-Tracking_Scan_Path_as_a_Biomarker_for_Autism_Screening_Using_Machine_Learning_Algorithms
2024	Deep Learning for Autism Detection Using Eye Tracking Scanpaths	DenseNet, Efficent Net, ResNet, MobileNet	https://www.researchgate.net/publication/380086219_Deep_Learning_for_Autism_Detection_Using_Eye_Tracking_Scanpaths