Publications Template

#	Research Title	Field	Abstract	Year of Publication Publishing	Publishing Link "URL"
1	**ITSR-HISL: An Improved Model for Trajectory Signature Recognition in Human Interactive Sign Language**	Computer and Information Technology	Trajectory tracking is used to keep tracks objects. Trajectory tracking control is used to affect desired trajectories of a device, human and anything can move. In order to precisely track specified trajectories, or be able to follow more general trajectories, many tracking control algorithms have been suggested, but still there is some problems of tracking trajectory in its application. This paper introduces a	2015	https://ieeexplore.ieee.org/abstract/document/7363178

		new proposed model for trajectory signature tracking that combines the maximally stability extremal regions (MSER) feature extraction of first level transformed domain descriptors with K-nearest neighbor classifier. Experiments have been carried out on large datasets of tracking trajectories with different characteristics. Experimental Results showed that the proposed model produce outstanding performance. Significant improvements have been showed in terms of recognition rate and recognition efficiency.		

| 2 | Efficient deep learning models based on tension techniques for sign language recognition | Deep Learning | Communication by speaking prevails among the various ways of self-expression and communication between people. Speech presents a significant challenge for some disabled people, such as deaf people, deaf and hard of hearing, dumb and wordless persons. Therefore, these people rely on sign language to interact with others. Sign language is a system of movements and visual messages that ensure the integration of these individuals into groups that communicate vocally. On the other side, it is | 2023 | https://www.sciencedirect.com/science/article/pii/S2667305323001096 |

| | | necessary to understand these individuals' gestures and linguistic semantics. The main objective of this work is to establish a new model that enhances the performance of the existing paradigms used for sign language recognition. This study developed three improved deep-learning models based on YOLOv5x and attention methods for recognizing the alphabetic and numeric information hand gestures convey. These models were evaluated using the MU HandImages ASL | | |

			and OkkhorNama: BdSL datasets. The proposed models exceed those found in the literature, where the accuracy reached 98.9 % and 97.6 % with the MU HandImages ASL dataset and the OkkhorNama: BdSL dataset, respectively. The proposed models are light and fast enough to be used in real-time ASL recognition and to be deployed on any edge-based platform.		
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