

S/N	Reference	Dataset	Method	Result	Limitation
1	Mukherjee et al.	Webcam videos capturing mid-air finger writing	1. Faster R-CNN for hand detection 2. Geom. analysis for finger counting 3. DWCE for finger-tip detection and tracking Velocity-based criterion for termination	Precision: 73.1% Real-time: 18.5 fps Char. recognition: 96.11% Incep-v4: 98.12% Incep-v3: 97.96% ResNet: 97.29% VGG-16: 96.75% AlexNet: 96.11%	Challenges in initialization and termination Precision affected by small fingertip size
2	Alam et al.	Self-collected RTD datase	LSTM(with normalization)	99.17%	Misclassification of similar-looking characters, accuracy impacted by RGB webcam limitations , and reduced performance when fingertip faces the camera.
			LSTM(without normalization)	98.68% -99.08%	
			CNN (with normalization)	99.06%	
			CNN (without normalization)	98.26% - 98.89%	
		6D motion gesture (6DMG) dataset	LSTM(with normalization)	99.32%	
			LSTM(without normalization)	98.68% - 99.08%	
			CNN(with normalization)	99.06%	
			CNN(without normalization)	98.26% - 98.89%	
3	Chayti Saha et al.	BanglaLekha-Isolated	CNN model with preprocessing steps (resizing, gray scaling, augmentation)	Training : 99.36%, Validation : 97%, Test : 97.30%	Dataset size, variability in hand gestures, and limited computational resources may affect generalization and real-time performance
4	Mahmud et al.	Uppercase English letters, 640x480	Depth-based SVM with DTW distance	96.85% accuracy	Small dataset (15 users), limited to depth-based features