











MNIST 50 results collected

Units: error %

[Classify handwritten digits](#). Some additional results are available on the [original dataset page](#).

Result	Method	Venue	Details
0.21%	Regularization of Neural Networks using DropConnect 	ICML 2013	
0.23%	Multi-column Deep Neural Networks for Image Classification 	CVPR 2012	
0.23%	APAC: Augmented PAttern Classification with Neural Networks 	arXiv 2015	
0.24%	Batch-normalized Maxout Network in Network 	arXiv 2015	<button>Details</button>
0.29%	Generalizing Pooling Functions in Convolutional Neural Networks: Mixed, Gated, and Tree 	AISTATS 2016	<button>Details</button>
0.31%	Recurrent Convolutional Neural Network for Object Recognition 	CVPR 2015	
0.31%	On the Importance of Normalisation Layers in Deep Learning with Piecewise Linear Activation Units 	arXiv 2015	
0.32%	Fractional Max-Pooling 	arXiv 2015	<button>Details</button>
0.33%	Competitive Multi-scale Convolution 	arXiv 2015	
0.35%	Deep Big Simple Neural Nets Excel on Handwritten Digit Recognition 	Neural Computation 2010	<button>Details</button>