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Sign Language Recognition Application using Python and OpenCV

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Abstract: *Deep learning (DL) is a machine learning method that allows computers to mimic the human brain, usually to complete classification tasks on images or non-visual data sets. Deep learning has recently become an Industry-defining tool for it's to advances in GPU technology. Deep learning is now used in self-driving cars, fraud detection, artificial intelligence programs, and beyond. These technologies are in high demand, so deep learning data scientists and ML engineers are being hired every day. Sign language recognition has gained focus over the last few years, it is a difficult task for normal human beings to interpret sign language. The project deals with the real time input which is given by the user , recognition of gesture is done by application of support vector machine(SVM), Convolutional neural network (CNN) and other required algorithms, after this step the hand gesture is recognized and its meaning is predicted and message.*

Keywords: CNN, Sign Language, Gesture Recognition, OpenCV, ROI, Relu, Silhouette, Pooling, Histogram

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