

The selection of the Support Vector Machine (SVM) for this pose classification task was driven by several factors:

The problem at hand is a supervised learning task where we aim to map input features To specific output classes SVM are well suited for such tasks, providing a straightforward and well suited solution

The Limitation are:

Training an SVM, particularly with non-linear kernels, low in performance especially with large datasets in compared to deep learning models such as CNN/RNN. And also a point to note is that SVMs can be sensitive to outliers in the training data. Outliers can be disproportionately influence of the boundary. Lastly as we all now in the machine learning community the SVM models are limited in the explainability because they are complex and hard to explain these mathematical models