Abstract

# ANNOTATION SYSTEM FOR A NEURAL NETWORK

An annotation system for a neural network and a method thereof are disclosed in the present application. The annotation system comprises a memory and a processor operatively coupled to the memory. The memory is configured for storing instructions to cause the process to receive information comprising a first set of unlabeled instances from at least one source; set a learning target of the information; select a second set of unlabeled instances from the first set of unlabeled instances by executing a software algorithm; and annotate the second set of unlabeled instances for generating labeled data. The software algorithm increases an efficiency of annotation in training neural networks for deep-learning-based video analysis by combining semi-supervised learning and transfer learning via a data augmentation method. The software algorithm can increase the efficiency of annotation by reducing an amount of annotation by an order of one magnitude.

(Fig. 3)