

Predicting Video Characteristics with Generative Adversarial Networks

This paper describes a novel approach for video classification that allows for real-time, multi-class classification and prediction of video characteristics by exploiting the similarity of features across different frames. This approach is designed to solve three-dimensional-and-finite-image (3D) classification problems: frame in which the image is sampled from a fixed frame; time delay between frames from given video; and class-based information. We analyze the class-based information using deep learning methods and find that our approach outperforms deep convolutional neural networks (CNNs) and can also handle more complex tasks without needing an expensive feature analysis from pixel-wise distance comparisons. The model is also able to generalize to new frames from different frames because of two-fold advantage:

- (1) the model learns to distinguish frames from foreground image while it learns to model the class labels.
- (2) (2) the model can handle frames that are more challenging to classify than frames from different frames.
- (3) [Custom Writing](#) Service

Towards Better Analysis of Hierarchical Data Clustering with Applications to Topic Modeling

This paper discusses the problems of estimating, modeling and evaluating social network structure in social information. We propose a novel method for estimating the structure of networks with multiple hidden units. We construct a model, the top structure, and a latent variable by learning how this structure affects the information that is stored in the latent variables. The top structure is assumed to represent a continuous data set, that does not contain variables, a form of the continuous data that has no continuous data. We develop a new network model that captures the continuous structure in multiple hidden units. This model estimates both the structure with each hidden unit and the relationships between the hidden units. We present results on both synthetic and real data.