



MVT9KD Dataset:

Movie Visual Tags for 9K Dataset

SUMMARY

MVT9KD provides auto-generated visual tags for over 9000 movie trailers. The movie IDs are in agreement with the movie IDs provided by "MovieLens (ML) dataset" (ML-20M or ML Latest Version). All the movie titles, ratings and associated movie genres and tags can be collected from the MovieLens website. We used the AWS Rekognition service to associate, celebrity, face and label tags to key frames from movie trailers and provide here the aggregated results.

INFORMATION ABOUT THE DATASET

This dataset provides a set of auto-generated visual tags extracted from movie trailers. Key frames of movie trailers are tagged using AWS Rekognition service to extract celebrity tags (e.g., #TomHanks & #BradPitt), object tags (e.g., #sky & #children), and face tags (e.g., #happy & #withGlass) from each image. Each annotation comes with a confidence level. There is some variation in the number of movies in each dataset due to availability of tags in trailers. The number of movie titles are 9292 for face, 9603 for objects and 7689 for celebrity dataset.

The result is gathered in four tab separated files as follows:

- MVT9KD_celebrity.csv.gz
- MVT9KD_face.csv.gz
- MVT9KD_object.csv.gz
- MVT9KD_object_ids.csv.gz

Brief explanation of the content and the usage of these files are as follows. More details can be found in the corresponding paper (in section **CITATION**). The description of each column is provided in the following tables:

Table 1: Description of celebrity dataset

Feature Type	Column title	Description
Numeric IDs	movieId	MovieLens IDs of the movie
Alphanumeric IDs	frameId	Frame id within each movie trailer

float	match_confidence	Detection confidence 50 - 100
string	celebrity_name	Name of celebrity detected in frame
string	celebrity_id	Id of celebrity detected in frame
string	celebrity_urls	Url to imdb page of celebrity (if exists)

Table : Description of face dataset

Feature Type	Column title	Description
Numeric IDs	movielid	MovieLens IDs of the movie
Alphanumeric IDs	frameid	Frame id within each movie trailer
float	confidence	Detection confidence 50 - 100
int	age_range_low	predicted age of the detected face
int	age_range_high	
float	happy	Strength of the feeling in the detected face. Float value between 0. - 100
	sad	
	angry	
	confused	
	disgusted	
	surprised	
	calm	
	unknow	
float	gender_confidence	Confidence of gender detection 50 - 100
string	gender_value	Detected gender Female/Male
float	eyeglasses_confidence	Boolean value if the face has the feature and its corresponding detection confidence 0. - 100
boolean	eyeglasses_value	
float	sunglasses_confidence	
boolean	sunglasses_value	
float	eyesopen_confidence	
boolean	eyesopen_value	
float	smile_confidence	
boolean	smile_value	
float	mouthopen_confidence	
boolean	mouthopen_value	
float	mistache_confidence	
boolean	mustsche_value	
float	beard_confidence	
boolean	beard_value	

Table 3: Description of object dataset

Feature Type	Column title	Description
Numeric IDs	movielid	MovieLens IDs of the movie
Alphanumeric IDs	frameid	Frame id within each movie trailer

int	label_id	Id of label from MVT9KD_object_ids.csv.gz
float	label_confidence	Confidence of label detection 0. - 100

Table 4: Description of object ids table

Feature Type	Column title	Description
Numeric IDs	label_id	Integer id of the label
String	label	The label

CITATION

=====

To acknowledge the use of the dataset in publications, please cite the following paper:

*Mehdi Elahi, Farshad Bakhshandegan Moghaddam, Reza Hosseini, Mohammad Hossein Rimaz, Nabil El Ioini, Marko Tkalcic, Christoph Trattner, and Tammam Tillo. **Recommending Videos in Cold Start With Automatic Visual Tags.** In Adjunct Proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization (UMAP '21 Adjunct), June 21–25, 2021, Utrecht, Netherlands. ACM, New York, NY, USA, 7 pages. <https://doi.org/10.1145/3450614.3461687>*

ACKNOWLEDGMENTS

=====

This work was supported by industry partners and the Research Council of Norway with funding to Media Futures: Research Centre for Responsible Media Technology and Innovation, through The Centres for Research-based Innovation scheme, project number 309339.