“Automatic Extraction of Machine Tags in Flickr Service”
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Need for More Flickr Machine Tags
System Architecture

Images

Tags

flickr
Previously Reported Automated Extraction of Machine Tags

» Face detection/people head-counting
» Face recognition
» Text detection/ recognition
» Logo detection/ recognition
» Watermarks detection/ recognition
» Dominant colour of clothes
» Near-Duplicates (image similarity)
» Bokeh effect detector

» Profile/en face classification
» Smile detection
» Unshaved faces
» Red eyes detection
» Nudity identification
» Dominant colour counter
» Landmark object recognition
» Sky(line) detection
» Emotion detection
» Age classifier
New Automated Extraction of Machine Tags
Detection of “Talking Head” Pictures (1/2)

- Face detection
- Mouth movement detection
- Cascade classifier

» Based on **Mouth Region of Interest processing**
» Processed picture-by-picture
Detection of “Talking Head” Pictures (2/2)

» Face detection using Haar Cascades
» Sensitivity 88%, Specificity 100%
» Developed
Detection of Day & Night Pictures

- Recognising:
  - Day scenes
  - Night scenes

- Based on neural network
- Tested on >2000 photos
- Accuracy >90%
- Developed
MOAVI
Video Quality Indicators

» Video quality assessment system for video sequences
» Quality of Experience (QoE)
» 13 quality parameters
» Temporal Activity (TA)
» Spatial Activity (SA)
» Developed
Recognition of Gestures

» Creation & implementation of algorithms to recognize gestures in pictures

» Pending
Indoor/Outdoor

» Recognising:
  – Indoor scenes
  – Outdoor scenes

» Pending
Proceeding

» Create software allowing use of image indexing technology, to supplement VIME database of Flickr channel images

» Expected result of work (June 2017): creation of machine tags in selected Flickr service