Competition

ChaLearn Looking at People 2016 - Track 3: Smile and Gender Classification

Organized by MTT - Current server time: Aug. 25, 2017, 12:45 p.m. UTC

First phase	End
Development	Competition Ends
Feb. 15, 2016, midnight UTC	March 30, 2016, midnight UTC

Learn the Details | Phases | Participate | Results

Forums (/forums/5161/)

- **Get Data**
- Submit / View Results

ChaLearn Looking at People and Faces of the World 2016

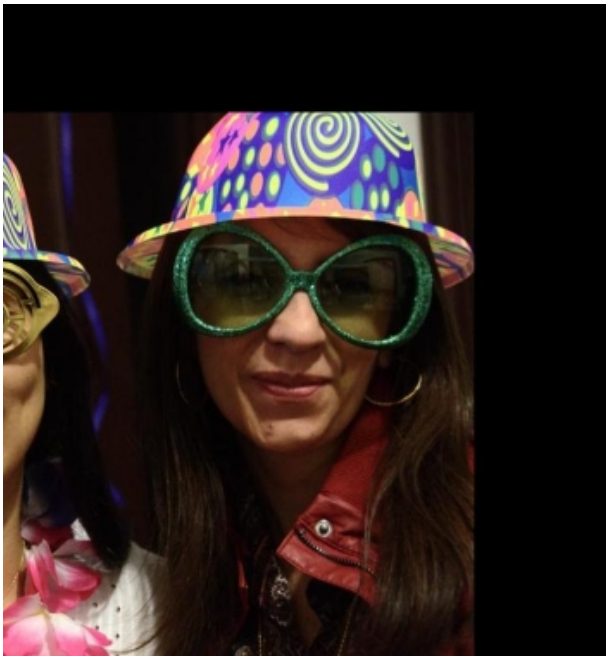
Track 3: Smile and Gender Classification

Data overview

The partition of Faces of the World dataset that will be used in this track contains over 9,000 images, each displaying a single individual, labelled with their gender and whether or not they are smiling. Images have been labeled by multiple individuals, using Zooniverse as a tool.

About (https://github.com/codalab/codalab/wiki/Project_About_CodaLab)

In this first stage, we provide two ZIP files containing the images for the training and validation sets with their corresponding labels. Participants will evaluate their methods in the validation set. Then, in the second stage, they will submit their models to be tested by the organisers of the track.



Data description

The dataset for this track has 9,258 images collectively labelled. The data has been split into 6,171 images for training and 3,087 images for validation. In this first stage, we provide two ZIP files containing the images for the training and validation sets and their respective ground-truth. The participants will evaluate their methods in the validation set. Then, in the second stage, they will send their models to the organisers, who will execute them on the testing set. The testing set will be composed of 4,000 images with the same characteristics as the training and validation set, obtained and annotated in the same manner.

The bounding boxes that we provide are not ground-truth bounding boxes, as we consider that face localization is part of the challenge. Given that the images are captured in totally unconstrained conditions, we cannot guarantee that there's only one face in the image. Thus, the bounding box is given to indicate exactly which of the faces (if more than one) is the one annotated.

You may use external code for face localisation. We provide a face locator you can use here (http://www.cs.nott.ac.uk/~pszyt/code/HeadHunter_PO-CR.zip). The detect_face_fit folder contains a

script (demo_detect_fit.m) for detecting a face with DPM face detector model and fitting with Project-Out Cascaded Regression (PO-CR).

The Code for DPMv5 (baseline) is based on following paper: [1] M. Mathias, R. Benenson, M. Pedersoli, L. Van Gool, "Face detection without bells and whistles", ECCV 2014. Should you use the DPMv5 code, please cite [1]

The code for PO-CR is based on following paper: [2] G. Tzimiropoulos, "Project-Out Cascaded Regression with an application to Face Alignment," CVPR 2015 Should you use the PO-CR code, please cite [2]

For this track, the file `gender_fex_trset.csv` and `gender_fex_valset.csv` contain image identifiers, bounding boxes around the faces and gender and smile of the faces (represented as a binary) in the images. Each line of the file represents one image in the training or validation set, as shown in the following figure:

image_name	bbox_x	bbox_y	bbox_wic	bbox_hei	Gender	Smile
im_GenFex_00001.jpg	80	91	99	112	0	1
im_GenFex_00002.jpg	374	426	466	531	1	1
im_GenFex_00003.jpg	43	44	52	54	0	1
im_GenFex_00004.jpg	94	161	116	200	1	1
im_GenFex_00005.jpg	199	215	247	267	1	1
im_GenFex_00006.jpg	123	124	152	154	1	1
im_GenFex_00007.jpg	45	59	55	72	1	1
im_GenFex_00008.jpg	103	113	128	140	1	1
im_GenFex_00009.jpg	75	89	92	110	0	1
im_GenFex_00010.jpg	367	315	457	393	1	1

Where:

1. 1st column: name of the image
2. 2nd column: x coordinate of the bounding box around the detected face
3. 3rd column: y coordinate of the bounding box around the detected face
4. 4th column: width if the bounding box around the detected face
5. 5th column: height if the bounding box around the detected face
6. 6th column: gender of the face (0 is male and 1 is female)
7. 7th column: whether or not the face is smiling(0 is not smiling and 1 is smiling)

Data access

During the competition, the links to available data will be published here. Use them to access the data and labels. Data is provided in multiple files.

About (https://github.com/codalab/codalab/wiki/Project_About_CodaLab)

The data is available only for research and educational purposes, within the scope of the challenge. ChaLearn and the organizers make no warranties regarding the database, including but not limited to warranties of non-infringement or fitness for a particular purpose. The copyright of the images remain the property of their respective owners. By downloading and making use of the data, you accept full responsibility for using the data. You shall defend and indemnify ChaLearn and the organizers, including their employees, Trustees, officers and agents, against any and all claims arising from your use of the data. You agree not to redistribute the data without this notice. For more information please refer to Terms and Conditions (../4081#learn_the_details-terms_and_conditions).

1. Development phase:

Training Data: Input data and labels for training

- Data and Labels:
- `Training data [131 Mb] (../../my/datasets/download`
- `Validation data [65 Mb] (../../my/datasets/downloa`

Testing data: Labels are included in a .mat file.

- `Testing data [177 Mb] (../../my/datasets/download/`

Provided scripts

The organizers encourage the use of Python. We provide a script to facilitate the evaluation process. The script can be downloaded from here (c39cd4fb-ebc6-4232-ad8e-58d11afb2965). To use the script, create a folder for input data "input", with two sub-folders:

- ref: Folder containing a file train_gt.csv with the ground truth labels
- res: Folder containing a file Predictions.csv with the predictions to be evaluated

Create an empty folder "output" where the score will be written.
Execute the script as:

python evaluate.py input output

Requirements

About (https://github.com/codalab/codalab/wiki/Project_About_CodaLab)

- Python Imaging Library (PIL) 1.1.7
- NumPy 1.8.0

- Development:
  - Training Data (Images and Labels) (https://competitions.codalab.org/my/datasets/download/990925db-49eb-4568-bf04-9af628cd5846)
  - Validaton Data (Images and Labels) (https://competitions.codalab.org/my/datasets/download/91e09123-843c-4804-8293-3937c53c1cfd)
- Final Evaluation:
  - Challenge Data (http://gesture.chalearn.org/)