

CMT 209 Informatics Coursework 2017 - Abstract Scenes Data

The data used for this coursework has been adapted from the "abstract scenes" dataset by Zitnick et al.¹

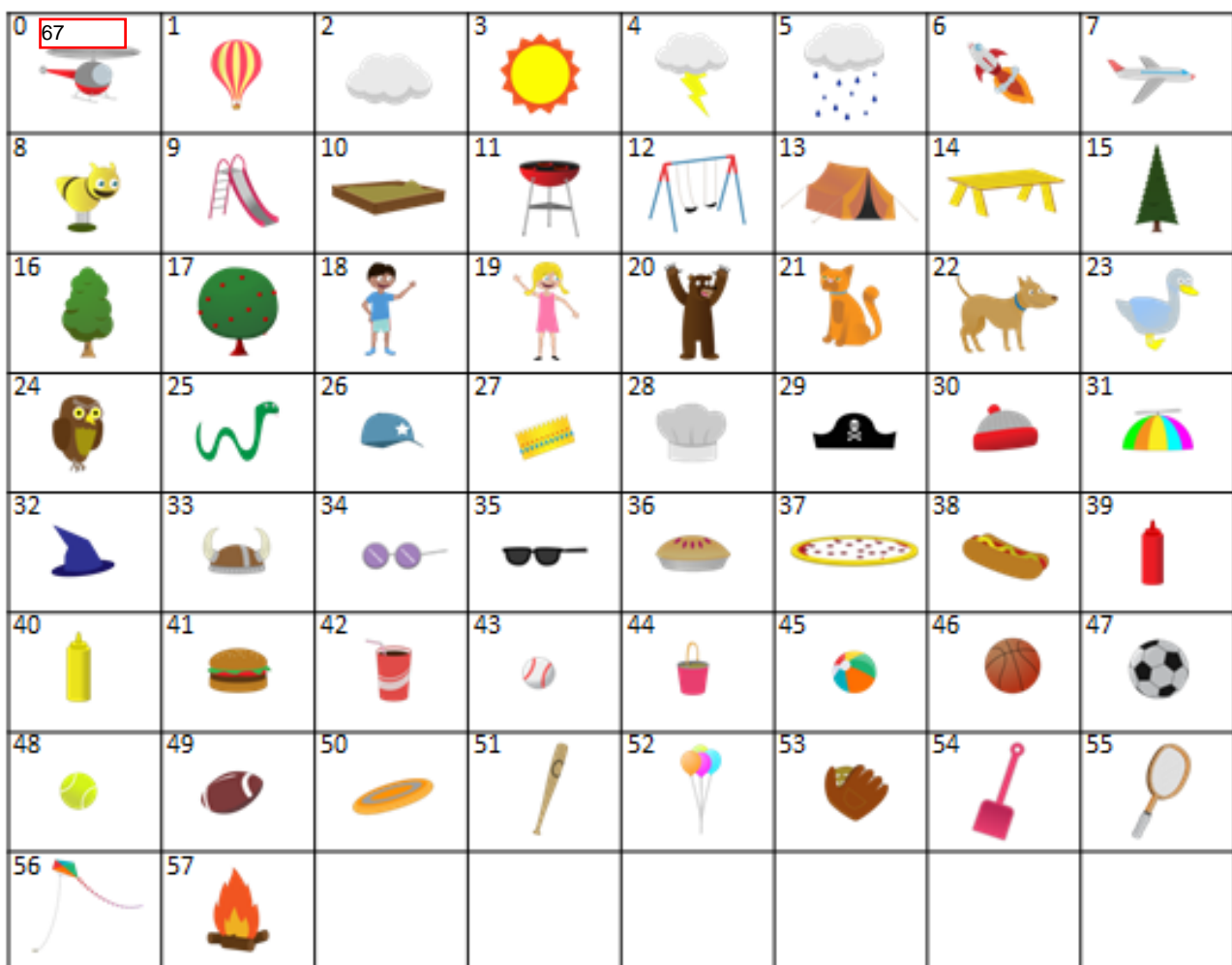
The original dataset has been constructed through crowdsourcing as follows

1. A first set of users created images of children playing outdoors from a predefined set of clipart objects (see below).
2. A second set of users created a 1-2 sentence description of each image.
3. A third set of users created images from each of the descriptions (ten per description).

The images we use here are from the third step. Images are named SceneX_Y, where X is the number of the description the image has been generated from, and Y is the image identifier within that class.

Image Tags

File image_tags.csv provides the tags of all images, where the first column identifies the image and the remaining 58 columns contain 1 if the column's object is in the image and 0 otherwise. The 58 clipart pieces are



¹ C. L. Zitnick, and D. Parikh, Bringing Semantics Into Focus Using Visual Abstraction, In CVPR, 2013.

and the corresponding standard tags are

- 0 helicopter
- 1 hotairballoon
- 2 cloud
- 3 sun
- 4 lightning
- 5 rain
- 6 rocket
- 7 airplane
- 8 bouncy
- 9 slide
- 10 sandbox
- 11 grill
- 12 swing
- 13 tent
- 14 table
- 15 pinetree
- 16 oaktree
- 17 appletree
- 18 boy
- 19 girl
- 20 bear
- 21 cat
- 22 dog
- 23 duck
- 24 owl
- 25 snake
- 26 baseballcap
- 27 crown
- 28 chefhat
- 29 piratehat
- 30 wintercap
- 31 bennie
- 32 wizardhat
- 33 vikinghat
- 34 purpleglasses
- 35 sunglasses
- 36 pie
- 37 pizza
- 38 hotdog
- 39 ketchup
- 40 mustard
- 41 hamburger
- 42 soda
- 43 baseball
- 44 pail
- 45 beachball
- 46 basketball
- 47 soccerball
- 48 tennisball
- 49 football

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|----|---------------|
| 50 | frisbee |
| 51 | baseballbat |
| 52 | balloons |
| 53 | baseballglove |
| 54 | shovel |
| 55 | tennisracket |
| 56 | kite |
| 57 | fire |

Spatial Information

The file `boy_hand.csv` provides for each image a list of objects and their closeness to the boy's hands. Closeness is a number between 0 and 1, with 1 being the closest. Objects with closeness 0 are omitted from the file. The columns are: Scene Identifier, Object, Closeness.

Files `boy_head.csv`, `girl_hand.csv` and `girl_head.csv` provide the same information with respect to the boy's head, girl's hands and girl's head, respectively.