Photo Recall: Using the Internet to Label Your Photos

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**Introduction:**
Photo Recall enables personal photo search using text queries without any manual labeling, by connecting photos to public information online.

**Public Events**
Find holidays on Wikipedia around date

**Places and Activities**
Place: FAO Schwarz
City: New York City
State: New York
Country: USA
Category: store/shop
Category: toy shop

**Pretrained Visual Classifiers**
Pretrain visual classifiers for many categories using ImageNet

**Visual Classifiers**
Issue query "green dress" on Google Images and train a visual classifier on-the-fly

**Visual Object Matching**
Classify user images & return top matches

**Flow Computation:**
A search results on the "language" layer, which propagates scores down to the "images" layer. A description is generated by propagating scores up from the image and then adding to the search flow.

**Quantitative Evaluation**
Percent of places found by proper name: 71.2%
Percent of places found by category name: 29.1%
Percent of events found: 30.2%
Percent of event tags matched: 17.3%
Visual queries recall@10: 49.6%