Multimodal Neural Language Models: Supplementary material

Figure 1. Retrieval results on IAPR TC-12 and the Attributes dataset when using text to retrieve images (T → I, left) and images to retrieve text (I → T, right). k refers to k-means feature maps (the inputs used to our convolutional models). Retrieving descriptions from image queries use a shortlist size of 100. For the Attributes dataset, we used a random subset of 5000 test images.
Figure 2. Sample description retrieval given an image. The top result is displayed.
Figure 3. Sample sentence generation.
two bunk beds made of wood with multicoloured bedcover; there is a blue cupboard between them; in the background on the right there is a window with blue curtains;

a round fountain with grey cobblestones and a whole fin in the middle of a red square with park benches, a lawn, a brown house, cars on a car park, many high trees, a black bird in view (from above) of the trees, houses and streets of a city with high-rise buildings and a skyscraper in the foreground and grey clouds in the sky in the background;

a square and a street with burning street lamps and an illuminated cathedral with two towers at night;

many people are riding on brown horses on a trail in a forest with many trees in the background;

people are sitting and standing on a light brown boat made of reed on a dark blue lake; brown rocks and a grey sky in the distant background;

cricket players and two umpires on a field; spectators on a grandstand under construction with three high red cranes behind it; trees and a blue sky with white clouds in the background in the background;

a boy with grey trousers, a black jacket, a white helmet, ski goggles and blue skis is kneeling in the snow;

twice the intrigue radiates from these flirty hoop earrings, hoops of 14k yellow ribbed gold shape the perky pair.

these high heels will shine at any dressy occasion, the strappy and open toed will allow your toes to feel cool and airy, available colors: silver reptile print, white satin.

every woman deserves a pair of diamond stud earrings, brilliant NUM, NUM carat round - cut diamonds are set in four prongs to perfection in 14k white gold, each earring comes with a post and screw back closures for extra security.

the zippurse backpack is great as a computer bag (fits a laptop), school bag, diaper bag or a beach bag; this bag can be used for almost anything, you can carry it as a backpack or a tote, just re-adjust the straps! available colors: black, crimson, moss, walnut.

enchant in european style with the elvira RARE boot from tükken antistress, this luxurious boot has a full grain leather and suede upper with buckle detail for a riding-inspired look, a padded footbed lends additional cushioning, while the side zipper allows easy on-and-off; the lightweight synthetic sole flexes with ev...

the prode br1994 leather shoulder bag is a popular fashionable handbag made out of soft calfskin leather with a rich finish, this a beautiful latest design large shoulder which will make you look like million dollars.

the jessica simpson RARE hobo bag is a sлинk around town carrying bag, this fashionable jessica simpson hobo is made of synthetic leather; it holds your wallet sunglasses personal technology and a small umbrella.
Figure 5. Sample image retrieval given descriptions. The top 4 results are displayed.