

Fashion Small Talk: Generating Friendly Comments on the Attire of the Interacting Person by using Image Captioning Technology

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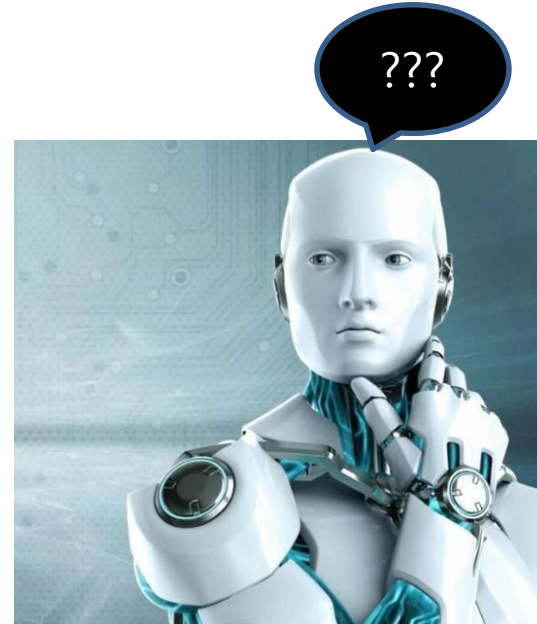


Initiating Conversation with a Small Talk

The pink sweater makes you look so young



Thaks, honey!



For ROBOTS, Small talk is harder than a conversation on a specific theme.

Factual Description vs. Opinion



Factual Description

Opinion

Factual Description

A Grandma is standing with a stick wearing pink padding.

Opinion


- ✓ The padding looks warm.
- ✓ The pink color is pretty on you.
- ✓ Floral pattern of the pants are cute.



If we can train the captioning network to generate factual description,

It would also be possible to generate an opinion on the given image, only if such training data is given

Data Collection



Comment

자켓이 격식 있어 보이네요
자분하고 잘맞아 보여요
블랙바지에 그레이자켓 매칭이 고급스럽습니다
코트의 네모 모양이 검은 바지와 잘 어울리네요
고급스러워 보이네요
옷의 체크 무늬가 고급스러워 보여요
자켓이 고급스러워 보이고 잘 어울리세요
색상이랑 잘 어울려서 우아해 보이세요
고급스러운 체크 무늬의 자켓이네요
단아한 느낌이 드는 것 같아요

The jacket looks formal.
It looks calm and polite.
Black pants and gray jacket matching are luxurious.
The square shape of the coat goes well with the black pants.
Look classy.
The checkered pattern on the clothes looks luxurious.
Your jacket looks luxurious and goes well with you.
Looks elegant because it goes well with the color.
It's a luxurious checkered jacket.
I think it feels elegant.

- ✓ 6,062 images of elderly people with variety of attires from the internet
- ✓ 8 to 11 annotators made comments on the attire of the person in the image (66,445 annotations)

More annotations per image than the 5 of typical image captioning training data

Experimental Result



붉은 옷이 강한 개성을 보여주네요.
The red clothes exhibit your unique personality.



깔끔한 스타일이 잘 어울리세요.
Neat and tidy style goes well on you.



옷차림이 나들이 갈 때 입기 좋아 보이네요
It looks good to wear when you go out.

The best BLEU-1 score is 0.33716