

# Fashion Captioning: Towards Generating Accurate Descriptions with Semantic Rewards

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## 1 Supplementary

### 1.1 More Examples on FACAD

More examples can be found in the online anonymous website:

[https://github.com/xuewyang/Fashion\\_Captioning](https://github.com/xuewyang/Fashion_Captioning).

We also showcase some examples directly in Fig 1.

### 1.2 Categories and Attributes

To showcase the massive categories of FACAD, we split all 74 categories into 5 subsets: top, bottom, one-piece, shoes, bags and accessories and list the 5 subsets in Table 1.

To know more about the details of the items, we display a subset of all attributes in Table 2.

### 1.3 Evaluation Metrics Explained

We provide more information about BLEU, METEOR, ROUGE-L, CIDEr and SPICE metrics. BLEU roughly measures the fraction of N-grams that are in common between a generated one and a groundtruth. METEOR measures uni-gram precision and recall, extending the exact word matches to include similar words based on WordNet synonyms and stemmed tokens. ROUGH-L counts the number of overlapping word sequences between the generated sentence and the groundtruth caption. CIDEr measures the similarity of a generated sentence against a groundtrue caption using sentence similarity. SPICE compares semantic propositional content between a generated sentence and a groundtruth.

**Title:** *Drape Collar Knit Blazer*

**Fashion Caption:** A softer, more casual version of your workday *blazer* is made in a comfy cotton *knit* with a *drape collar* and raw-edge seams.

**Color:** Black

**Meta:** 26" regular front length; 22" back length (size Medium); 25" petite front length; 21" back length (size Medium P);

*Drape collar*; Long sleeves *blazer*; Partially lined; 100% cotton; Hand wash; dry flat; *knit*



**Title:** *Rounded V-Neck Tee*

**Fashion Caption:** A gently *rounded V-neck*, short sleeves and a chest pocket style a soft cotton-blend *tee* in a multitude of colors.

**Color:** White

**Meta:** *Rounded V-neck*; Short sleeves *tee*; Semi-sheer; 60% cotton; 40% modal; Machine wash cold; dry flat; Imported; Point of View and Petite Focus



**Title:** *Canvas Workwear Jacket*

**Fashion Caption:** Rugged and ready for anything, this *workwear* inspired canvas *jacket* keeps it simple with a sleek button-front and multiple useful pockets.

**Color:** Military Green

**Meta:** *Workwear*; Front button closure; Spread collar *jacket*; Button cuffs; Dual-entry hand-warmer pockets; chest zip pocket; 100% cotton; Machine wash; line dry



**Title:** *Yaro Ankle Strap Sandal*

**Fashion Caption:** Modern and minimalist, an essential *ankle strap sandal* set on a chunky wrapped heel serves as a versatile go-to style.

**Color:** Pink

**Meta:** 4" heel (size 8.5); 3" *ankle strap* height; Adjustable ankle strap with buckle closure *sandal*; Leather, textile, synthetic or faux-fur; upper/synthetic lining and sole; Imported; Women's Shoes



**Title:** *Reversible Faux Leather Tote & Wristlet*

**Fashion Caption:** Supersoft *faux leather* flips inside-out for a reversible *tote* while a matching wristlet multiplies your styling options and keeps you organized on the go.

**Color:** Ivory

**Meta:** Magnetic closure; 100% polyurethane; *Faux leather*; *Tote*; By Street Level; imported; BP.



Fig. 1: More examples for FACAD. The images are of different perspectives, colors and scenarios (shop-street). Other information contained include a title, a description (caption) from a fashion expert, the color info and the meta info. Words in color denotes the attributes used in sentence.

Table 1: List of categories.

subset	categories
top	tee, jacket, sweater, blouse, coat, sweatshirt, bra, cardigan, hood, tank, blazer, top, polo, pullover, camisole, vest, turtleneck, henley, parka
bottom	jeans, pants, shorts, skirt, trousers, legging, trunk, thongs, sweatpants, jeggings, tights, chinos
one-piece	dress, gown, jumpsuit, swimsuit, bodysuit, pajamas, robe, suit, one-piece, bikini, derby, chemise
shoes	boot, sandal, sneaker, pump, loafer, joggers, flop, slippers, wedge, wingtip, clog
bags	backpack, handbag, shoulder bag, beach bag, clutch bag, tote bag, belt bag, satchels
accessories	watch, hat, bracelet, gloves, necklace, glasses, wallet, rings, belt, brooches, earrings, tie, scarves

Table 2: List of attributes.

attributes
brief, paillette, slipdress, pull, park, linen, shell, sleeve, knit, maxi, dress, collar, poplin, cotton, wrap, strap, monk, logo, hood, plaid, slingback, water-resistant, fringe, stripe, sport, midi, bralette, paisley, platform, high-waist, faux-leather, front, henley, organic, track, nylon, pocket, stud, flare, thongs, waterproof, tie, neck, sparkle, graffiti, heart, chinos, cocktail, gown, silk, fill, power, brocade, sleeveless, print, skirt, solution, sequin, waffle, satin, biker, graphic, burnout, wide-leg, garment, v-neck, nursing, lace, miniskirt, blouson, chambray, step, hem, wool, straight, zip, ankle, leopard, fit, acid, cable, taper, corduroy, slide, ruffle, crop, boxer, reversible, camisole, slim, velvet, curve, dot, tank, sheath, denim, open, toe, basketball, floral, button, paperbag, trunk, wedding, bodice, chiffon, horse, stretch, crepe, twist, flag, oxford, thermal, cargo, teddy, bear, fur, patent, maternity, ponte, crew-neck, classic, funnel, alpaca, blend, flannel, chukka, pinstripe, seersucker, side, bottom, sundress, cup, dye, isle, jacquard, shoulder, turtleneck, check, center, seam, jersey, athletic, dobby, strapless, pleat, utility, fleece, sweatshirt, pinafore, swim, gingham, wedge, cashmere, rib, lounge, georgette, control, tights, body, herringbone, line, espadrille, waistband, sock, metallic, minidress, board, boucl, reverse, weave, tech, joggers, split, cardigan, french, terry, knee, slit, poncho, trim, con, star, moon, inset, bib, space, chain, vintage, cutout, trench, shaker, stitch, twill, flat, trousers, trumpet, derby, peplum, illusion, mesh, bodysuit, romper, bandeau, keyhole, balloon, ribbed, cozy, slippers, solid, pliss, drawstring, hybrid, cap, merino, racerback, chemise, quarter, matthew, mixed, mountain, fine, gauge, coyote, rainbow, roll, zebra, cuff, portrait, pump, wave, girl, honeycomb, snake, puffer, skin, double, face, organza, butterfly, sheer, army, tunic, prairie, gore, tex, texture, sleep, sweatpants, loafer, . . .