

**STYLLIZEA: NAME RECOMMENDING SYSTEM FOR
FASHION PRODUCTS USING IMAGE CAPTIONING ON
SINGLE-OBJECT IMAGES AND MULTIPLE-OBJECT IMAGES**

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Abstract

As consumers are more into online shopping besides of physically shopping at stores, fashion store owners are daily users of e-commerce systems. Uploading products and inventory on to these systems have always been a hassle as they need to be enough creative to fill in certain fields of these systems by defining attributes and words that are most relevant to a product that will help the product convert into a purchase. This research focuses automating the filling of the name field of fashion ecommerce systems by analyzing the products image by analyzing the uploaded product image with the feature of identifying both single clothing object images and multiple clothing object images. To address this issue a deeper look in to image captioning is taken. Image captioning has the ability to describe an image by summarizing the information of extracted features and generate a text description which human can understand.

This approach is followed with a focus on extracting and embedding external attributes related to fashion products during the process of image captioning. It remains a hardly been asked and open problem to generate a caption on one single object and multiple object images. We identify that the main challenge faced is to ensure the generated description to include a satisfactory amount of adjectives and pay attention to details on the object/objects. Finally, this research disrupts an industry that has not been automated for over a decade by developing a final product derived from the technology of image captioning.

***Index Terms* – image captioning, fashion name generator, fashion object detection**