

S.no	Title	Year	Author	Methodology	Pros	Cons	Infrared
1	Fashion Coordinates Recommender System Using Photographs from Fashion Magazines	2011	Tomoharu Iwata,Shinji Watanabe Hiroshi Sawada	<ul style="list-style-type: none"> <li>• Data Set</li> <li>• Region Detection</li> <li>• Baseline Recommendation Method based on Visual Feature Similarities</li> </ul>	In our experiments, we used color information for the features. However, the texture and the shape of items may also constitute important information. Finally, it is valuable to recommend coordinates that match the user’s preference and situation, such as business, dating or formal. This personalized recommendation can be achieved by using the history of the clothes the user has worn and the context.	The top and bottom regions may not appear immediately below the face region when the fashion model leans, sits or lies down; the border of top and bottom regions differs depending on the clothes, the fashion model’s style, and the angle at which the photographs were taken	By detecting regions directly using pose estimation algorithms, the method becomes applicable to photographs with a wide variety of poses. Second, the proposed topic model can be used to recommend coordinates for fashion items other than tops and bottoms, such as shoes, bags, hats and accessories. Third, we would like to investigate appropriate visual features for recommending coordinates
2	An Interactive Knowledge-based Recommender System For Fashion Product Design In The Big Data Environment	2020	Min DONGab, Xianyi ZENGba*, Ludovic KOEHLb , Junjie ZHANGa	<ul style="list-style-type: none"> <li>• The interactive knowledge-based design recommender system and knowledge base: structures and concepts</li> <li>• Acquisition and formalisation of physical and sensory data</li> <li>• Garment design process with the recommender system and feedback mechanism</li> </ul>	It cannot only recommend existing design schemes but also automatically generate new design solutions by making optimised combinations of basic design elements. The main component of this system is the design knowledge base, composed of five mathematical models characterising relations between consumer body shapes, fashion requirements and design factors.	This design process is realised by a series of interactions between the designer, the knowledge base and virtual product demonstration. It can be expressed by a cycle of consumer emotional requirements identification – design schemes generation – recommendation – 3D virtual prototype display and designer’s evaluation – design factors adjustment. The knowledge base, i.e. the five relational models presented in Section 4, can be updated by progressively integrating the designer’s evaluations on recommended design schemes.	Based on designer evaluation, the proposed system provides a feedback and self-adjustment mechanism, which can adjust the knowledge base automatically, according to the users’ perceptual feedback, and be adapted to the big data environment relating to continually increasing etransactions of brand companies.
3	Visually-Aware Fashion Recommendation and Design with	2017	Wang-Cheng Kang ,Chen Fang Adobe	<ul style="list-style-type: none"> <li>• Visually-Aware Recommender Systems</li> <li>• Learning the Model</li> </ul>	First, the optimization process substantially increases the preference score over that of the original image. Second, the L1-approximated images are similar to	The presented a system for fashion recommendation that is capable not only of suggesting existing items to a user, but which is also capable of generating new, plausible fashion	This follows the recent trend of incorporating representation learning techniques into recommender systems and methodologically is most similar to the work of where comparative

	Generative Image Models			<ul style="list-style-type: none"> <li>From Recommendation to Generation</li> <li>Personalized Design</li> </ul>	the given prototype, and most images are in the vicinity of the original image. Third, the process highlights the continuous nature of the space learned by the GAN.	images that match user preferences. This suggests a new type of recommendation approach that can be used for both prediction and design.	judgments between images are modeled using a certain type of Siamese network. We adapt the popular formulation from Bayesian Personalized Ranking (BPR) to include image content via a Siamese net.
4	Color Navigation by Qualitative Attributes for Fashion Recommendation	2018	Yeongnam Chae, Jiu Xu, Bjorn Stenger and Soh Masuko	<ul style="list-style-type: none"> <li>Item Image Segmentation</li> <li>Item Color Recognition</li> </ul>	The system distinguishes 85 attributes, each with three different possible magnitudes. This color navigation by speech was demonstrated in a mobile fashion recommender system. The proposed model is validated in a user study with 196 subjects.	(a) linear interpolation in 3D space and (b) interpolation in polar coordinate space. Users select the color that they consider to more accurately describe the change defined by the attribute, also being given the option of ‘neither’.	By interpolating the path between input color and target color in polar coordinates, the attribute-based query is converted to a query vector in the Lab color space. By measuring the distance between candidate color and query vector with the proposed distance measure, we navigate on JIS color palette.
5	MODA- A fashion community and outfit recommender Android application	2017	Shyamsundar Magar, Ritesh Sachan, Shreya Kondvilkar, Eashan Raina	An artificial intelligence equipped chatbot can also be created as a fashion assistant for the users to provide general fashion advice and to resolve queries.	MODA is a complete fashion, youth culture and online community inspired by street fashion websites and blogs designed for users to post their street-fashion photography featuring themselves and their outfits, to seek fashion advice and look for inspiring content based on recent fashion trends on their mobile phones	It maybe show unfit costume	This mobile community is inspired by street fashion and blogs which will provide advice and inspiration to users in various forms such as outfit images, blogs, latest fashion news, links to online fashion stores, polls, etc