# *Oğulcan AKCA (2006102068) – Tahir KURTAR (2006102006)*

# Fashion Recommendation System

Fashion Recommendation System offers a solution to recommend clothes that match users' personal fashion preferences. Such systems are of great importance to personalize and facilitate users' shopping experience. Offering clothing recommendations based on users' tastes and preferences can both increase user satisfaction and strengthen customer loyalty of online shopping sites. Therefore, recommending a similar product is the main topic of this study.

In their research in 2022 [1], B. Suvarna and S. Balakrishna proposed an efficient Deep Convolutional Neural Network (CNN) model to classify a given product. The proposed model was evaluated using a fashion product dataset and the results were found to be satisfactory. Thus, they found that it provides the ability to recommend products reliably and accurately. He, Tong, and Yang Hu in their 2018 research [2] stated that they used a fine-tuning technique to transform a general compatibility model into a model that includes personal preferences to achieve personalized recommendation. The designed system consists of two components: a feature network and a compatibility computation network. The feature network is realized with a deep convolutional network, while a multilayer fully connected network structure is used for the compatibility computation network. In their paper published in 2023 [3], L Sivaranjani developed a hybrid recommender system that combines the existing recommender system with deep learning to recommend effective fashion products using images of fashion products.

The "Fashion Product Images Dataset" dataset [4] and the "E-commerce Product Images" dataset [5] available on Kaggle are aimed to be used in the study. One of these two datasets will be selected and the techniques and algorithms in the literature review will be used in the selected dataset throughout the study. If there is a need to use another dataset, it is planned to download product images from Trendyol website.

# References

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2. He, Tong and Yang Hu. “FashionNet: Personalized Outfit Recommendation with Deep Neural Network.” ArXiv abs/1810.02443 (2018): n. pag.
3. L. Sivaranjani, S. K. Rachamadugu, B. V. S. Reddy, B. R. A, M. Sakthivel and S. Depuru, "Fashion Recommendation System Using Machine Learning," 2023 4th International Conference on Smart Electronics and Communication (ICOSEC), Trichy, India, 2023, pp. 1367-1374, doi: 10.1109/ICOSEC58147.2023.10275967.
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5. Kaggle Dataset: https://www.kaggle.com/datasets/vikashrajluhaniwal/fashion-images/data