LITERATURE SURVEY

1.1 TITLE- Scenery-Based Fashion Recommendation with Cross-Domain Generative Adversarial Networks

AUTHOR- Sang-Young Jo; Sun-Hye Jang; Hee-Eun Cho; Jin-Woo Jeong

DESCRIPTION

To build an effective fashion recommendation system is a still challenging issue due to its high complexity. Previous research works generally have focused on how to provide fashion items visually similar to the user's current fashion taste. However, a scenery (natural landscape) around users is also an important affective factor in recommending fashions. This paper presents a novel system to recommend fashion designs that fit target sceneries. To address this, the exemplar photos regarding the target landscape are first collected from the database. Afterwards, a cross-domain generative adversarial network (GAN) is applied to generate fashion designs from the sceneries. The experimental results demonstrate the feasibility of the proposed system and imply further research directions.

1.2 TITLE- Visual Based Prediction of Physical Characteristics for a Smart Fashion System

AUTHOR- Sophie Xiaofan Liu; Bingju Guo; Xiang Fang; Joshua C. Williams

DESCRIPTION

This paper proposes a visual based model to predict physical characteristics from the pictures of a group of customers that were taken from a smart fashion system (SFS) at a clothing retail store. This model incorporates image segmentation, object recognition and linear regression to build a prediction model. The physical characteristics that we are interested in includes people's height, weight, BMI, skin color, shoulder length, face widths at eyes level and mouth level and the distance between the eyes and chin. Eventually SFS will use these data to recommend to a customer the best suitable clothing options. An algorithm based on image processing techniques was developed to find some of these data. A linear regression model is used to predict other data which were not easy to find using the image processing techniques due to the poor illuminations in the pictures. The experiments have proved the proposed model is simple but efficient.

1.3 TITLE- A study of the Intelligent Material towards Fashion Innovation

AUTHOR- Wang Wen

DESCRIPTION

This paper introduced the mainly application of intelligent materials in fashion and clothing, summarized three operating types of intelligent materials: passive intelligent materials, active intelligent materials and advanced intelligent materials. Including temperature control material of clothing, shape memory material, photosensitive, thermal, humidity and pressure sensitive and other color changing materials. Meanwhile, four directions towards the future development of intelligent clothing are summarized, including high performance, high precision, information and data security as well as commercial popularity.

1.4 TITLE- Smart power grids — A perfect solution, or just a fashion

AUTHOR- A. Wiszniewski; J. Szafran; B. Brusilowicz

DESCRIPTION

The increase of the electric power demand is at the level 2–3% per year, and in some regions of the world may become much higher. In the same time the infrastructure of power systems develop much slower. The smart grid technology is to use modern telecommunication and informatics to bridge the gap. The aim is to integrate generation, transmission, distribution and consumption of the electrical energy to supply the power in reliable, safe, economic way with consideration of the environmental requirements. The technology consists of four main parts: • Management of demand. • Operational control of generation, transmission and distribution. • Protective devices of the new generation (adaptive and wide area). • Self healing and fast restitutions after system breakdowns.