

Identifying Fashion Trends Utilizing Color Analysis

Hehjun Lim

Albert Dorman Honors College

New Jersey Institute of Technology, Newark NJ 07102

This research applies color analysis on clothing images available online and distinguish the different trends in fashion to an underexplored domain. Color trends provide valuable insights to fashion designers, retailers, and industry professionals about the preferences and choices of consumers. By analyzing color trends, fashion brands align their designs and product offerings with the current market demands, enhancing their competitiveness and staying ahead in the industry. Consumers can utilize this research to receive inspiration for their own personal style as well.

Different methodologies are used to determine a comprehensive understanding of the color scheme of various datasets. Every image from multiple datasets is processed so that the background is removed, for the focus of this study lies solely on the colors of the outfits. Conclusions about the prominence and variety of colors are made to produce various types of data visualizations. Utilizing photos created and posted by individuals from various backgrounds exemplifies the diversity and creativity of fashion. The research also promotes inclusivity by demonstrating that determining future clothing trends or patterns does not require professionally taken photos.

The outcome of this research is a comprehensive understanding of color analysis techniques for fashion trends. Considering the popularity of social media platforms, researchers can apply this research methodology to explore the color analysis of clothing outfits across various social media channels. Its findings can contribute meaningfully to the knowledge surrounding fashion trend analysis and inform industry practices and consumer choices. It is important to acknowledge a limitation pertaining to the accessibility of up-to-date clothing images because publicly available datasets often consist of outdated images. Future work will focus on curating more modern datasets and providing insight into fashion trends beyond color. However, by bridging the gap between data-driven analysis and the ever-evolving world of fashion, this research establishes a strong foundation and paves a way for future research in applying advanced color analysis techniques to online clothing images.