

Understanding Over fitting in CNN Models: The Challenge of Insufficient Data and Increasing Complexity

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Introduction

The research study aimed to analyse the potential risks and fraud involved in mobile money transactions in Sierra Leone, with a specific focus on the mobile telecommunication companies Orange and Africell. Mobile money services face risks and challenges, and this study specifically addressed the issue of fraud in the provision of mobile money services to customers in Sierra Leone. The use of mobile money for transactions is becoming increasingly popular across Africa, with the potential to transform the prevailing cash-based economy to a credit-based one. However, with the growing use of mobile money services and the increasing number of business use cases being developed, it is essential to implement a comprehensive approach to mobile money risk and security to reduce security vulnerabilities and prevent fraud. Some mobile money service providers have lost large sums of money to fraud, highlighting the urgent need for effective fraud prevention measures. This research, therefore, examined the actions that mobile network operators providing mobile money services can take to prevent fraud. Additionally, the study investigated the awareness of mobile money users regarding the link between cell phone protection and the security of mobile money services on their phones [1].

Description

Data augmentation can be classified according to the intended purpose of use (e.g., increasing training dataset size and/or diversity) or according to the problems. Here are some examples of the latter: To address the occlusion issue, the random erasing technique was proposed; rotation and flipping were supposed to partially resolve the viewpoint issue; brightness was used to address the change in lighting, and cropping and zooming were used to address the scaling and background issues. The most common classification of data augmentation is deep learning-based data augmentation and traditional data augmentation, which is further classified as geometric, photometric, and noise data augmentation. For reviews of deep learning approaches for data augmentation. A decision model that prioritizes activities that support the development of a rural area in Chile is presented in this paper and is based on community preferences. The region's local government has tried unsuccessfully for many years to encourage economic growth. The incentive programs that have been offered have goals that are both complicated and contradictory. The determination of the appropriate weights for the various attributes is the most important aspect of this decision-making process. For multiple attribute decision-making, Sati's Analytical Hierarchy Process (AHP) is a versatile and tested decision support system. It provides decision makers with the ability to organize and evaluate the relative importance of their goals, alternatives, and/or solutions by incorporating both subjective and tangible data. The AHP is used to calculate weights that show how each proposed development strategy affects the community. The opinions demonstrate a wide range of preferences, much of which is due to the varying physical and financial circumstances of the experts involved [2,3].

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Overall, this research aimed to provide insights into the risks and challenges associated with mobile money transactions in Sierra Leone and suggest effective measures to prevent fraud and improve security in the provision of mobile money services. The results of the pairwise comparisons and the application of AHP to the problem are presented. We looked at how to use the information we got from the hierarchical decision structure in the best way. The conclusions are presented. Harbor activities, as well as industrial, agricultural, fishing, tourism, and commercial services, are pursued in the region. In pursuing any of these activities, numerous complex factors and goals typically conflict or interfere. Due to the restrictions that must be implemented, making a profit in some sectors leads to the decline of others.

The question at hand is which of the activities would have the greatest impact on the community in the future and contribute the most to the growth of the region. Identifying the area's factors and sectors was the first step in the research. In the early stages of the work, local decision-makers, experts, and government representatives from the region were questioned about the activities they believed would have the greatest impact on the region's progress. Consequently, numerous factors were suggested. The most important effects of carrying out particular activities were determined in the second step. The experts indicated their preferences in relation to their particular fields of knowledge and expertise. The final step consisted of assigning weights to the measured characteristics of each activity in order to rank the proposed development activities that had the potential to improve the local environment. We were able to achieve a comprehensive outcome by integrating the diverse opinions and preferences of the community's actors through the application of AHP to the problem situation: how the activities are ranked [4,5].

Conclusion

This required meetings and interviews with representatives of farmers, workers, and businesses; managers, engineers, representatives from businesses, tourism, and commerce; representatives from education and health; government, marine, and harbour officials, among others in the end, an expert panel of representatives from each sector of the study was put together. Representatives from the local Chamber of Commerce, the county Planning Commission, the Industrial, Tourism, and Harbour Committee, the local head of Education and Schools, and other residents were also included because local government and business leaders expressed an interest in participating in the ranking process. To achieve the objective of promoting regional development, a hierarchical structure was created. The design consisted of three levels, each addressing specific elements identified by specialists. The fundamental construction of the structure was established with the overarching goal of promoting regional development in mind.

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Conflict of Interest

The authors declare that there was no conflict of interest in the present study.

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