

Abstract

This project report presents the development of a smart crowd-counting system leveraging machine learning techniques. The system aims to count crowds in various scenarios and provide valuable insights for crowd management, event planning, and urban development. To achieve this, cutting-edge machine learning tools such as a pre-trained model, three well-known crowd-counting models and a trained neural network for learning crowd-counting challenges in images were utilized to extract feature maps with exceptional precision. A decision-making system was devised, employing supervised learning to map the optimal crowd-counting method to each feature map. The model was trained on extensive crowd-counting datasets to ensure robustness and adaptability. Additionally, an intuitive web interface was created, enabling easy navigation for both technical and non-technical users. The integration of these components results in a comprehensive crowd-counting system that demonstrates promising accuracy and usability. This project contributes to the advancement of crowd counting and provides a foundation for further research in this field.

Keywords:

Smart crowd counting, machine learning, feature maps, decision-making system, supervised learning, large-scale datasets, crowd management, event planning, urban development, web interface, Django



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Title

*Design and Implementation of a Smart Web-based System for
Crowd Counting In Images*

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