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Human Activity Detection by using Deep Learning

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Abstract: The subject of human activity recognition is considered an important goal in the domain of computer vision from the beginning of its development and has reached new levels. It is also thought of as a simple procedure. Problems arise in fast-moving and advanced scenes, and the numerical analysis of artificial intelligence (AI) through activity prediction mistreatment increased the attention of researchers to study. Having decent methodological and content related variations, several datasets were created to address the evaluation of these ways. Human activities play an important role but with challenging characteristic in various fields. Many applications exist in this field, such as smart home, helpful AI, HCI (Human-Computer Interaction), advancements in protection in applications such as transportation, education, security, and medication management, including falling or helping elderly in medical drug consumption. The positive impact of deep learning techniques on many vision applications leads to deploying these ways in video processing. Analysis of human behaviour activities involves major challenges when human presence is concerned. One individual can be represented in multiple video sequences through skeleton, motion and/or abstract characteristics. This work aims to address human presence by combining many options and utilizing a new RNN structure for activities. The paper focuses on recent advances in machine learning assisted action recognition. existing modern techniques for the recognition of actions and prediction similarly because the future scope for the analysis is to be developed in a high scale.

Keywords: Artificial Intelligence, Machine Learning, Deep learning, Convolutional Neural Networks, Computer Vision

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