Raak!

Object Detection Tools for Investigative Journalism
Library Research

Introduction

Investigative journalism often requires extensive research and analysis of information from various sources. With the increasing availability of video footage and advances in deep learning and computer vision techniques, there is potential for these technologies to be used in investigative journalism. Two research papers, one on the website lerf.io and one on ResearchGate, describe deep learning and computer vision techniques that could be useful in analyzing video footage related to criminal activity or other events.

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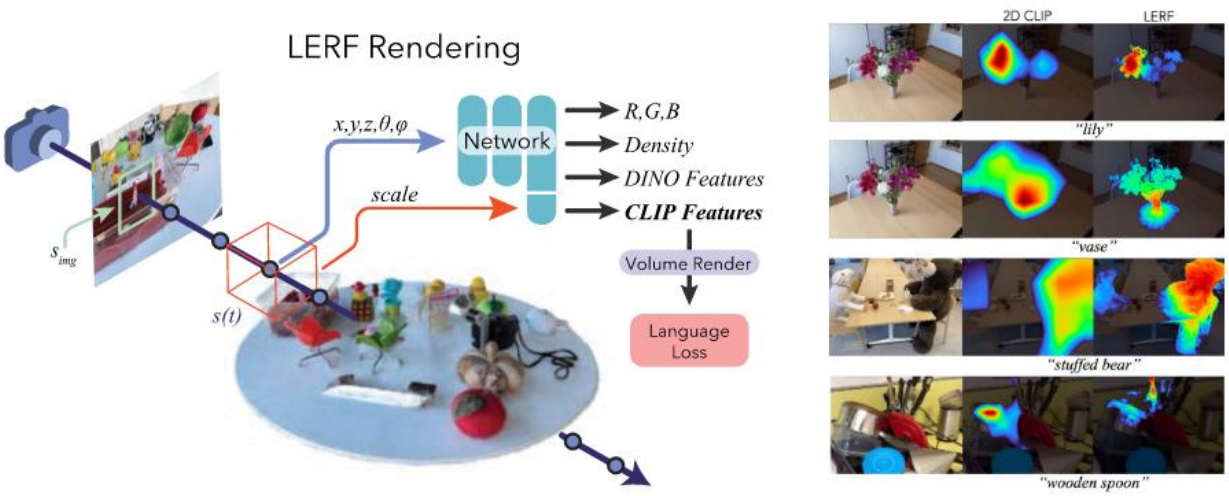


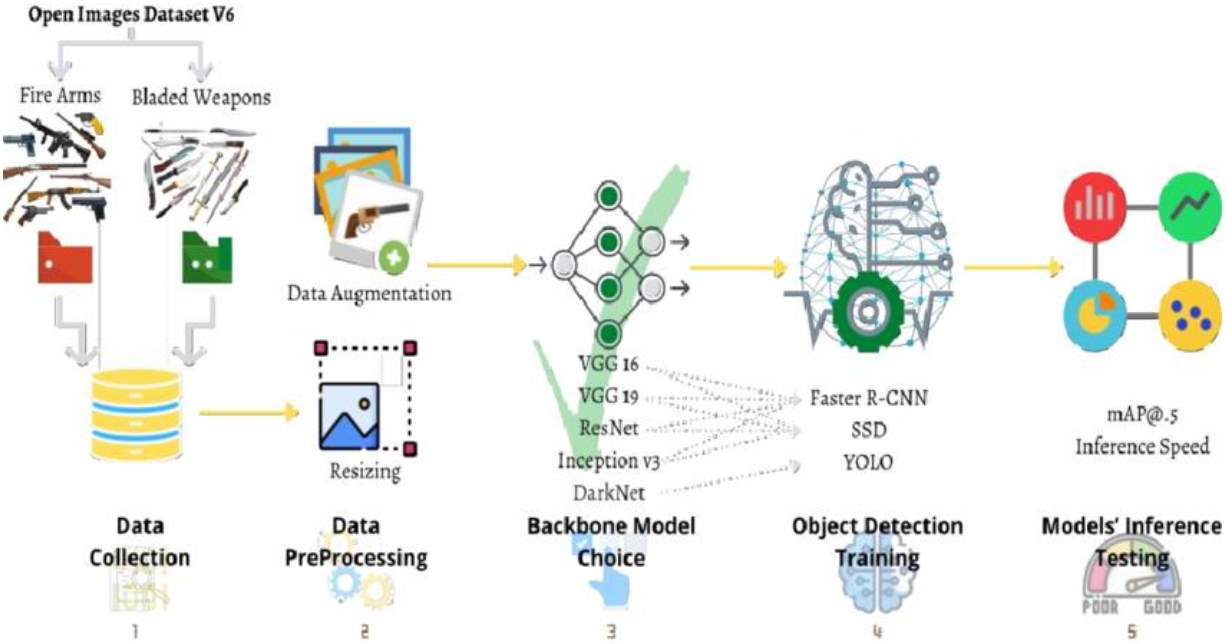
Lerf is an advanced tool that leverages machine learning to empower investigative journalists in their data analysis endeavors. With its capabilities, Lerf can effectively handle vast volumes of text data, including leaked documents, financial records, and government databases. By employing natural language processing (NLP), Lerf aids journalists in identifying crucial patterns, connections, and trends that may be arduous to uncover manually. Moreover, Lerf's NLP capabilities facilitate the extraction of essential information from text sources, enabling journalists to identify named entities, such as people, places, and organizations, and extract key quotes or statistics. In addition, Lerf equips journalists with the ability to detect trends and patterns within large datasets, enabling them to identify shifts in voting patterns or suspicious financial transactions that may indicate corruption. The tool also proves instrumental in verifying the accuracy of information by cross-referencing it with other sources and identifying any inconsistencies or contradictions. By effectively navigating through extensive data and pinpointing relevant information, Lerf emerges as a valuable asset for investigative journalists, significantly enhancing their efficiency and supporting their reporting endeavors.

Image and video-based crime prediction using object detection and deep learning

The research paper "Image and video-based crime prediction using object detection and deep learning" can be a useful tool for investigative journalists looking to analyze and investigate crimes in urban areas. Here are some ways in which investigative journalists could use this research paper:

Identifying high-crime areas: The deep learning algorithm proposed in the research paper can be used to identify high-crime areas in a city. Investigative journalists could use this information

to focus their reporting on specific neighborhoods or communities that have been particularly affected by crime.



Analyzing crime trends: The research paper's approach could be used to analyze crime trends over time. Journalists could track changes in crime rates in different areas and investigate potential factors contributing to these changes, such as changes in policing or economic conditions.

Verifying information: Investigative journalists could use the research paper's approach to verify information related to crimes. For example, they could use object detection and deep learning algorithms to analyze video footage of a crime and verify the identity of the suspects or the location of the incident.

Exploring potential biases: As with any machine learning approach, there is a risk of biases in the data or algorithm used in the research paper. Investigative journalists could investigate these potential biases and ensure that they are not perpetuating or amplifying harmful stereotypes or discriminatory practices.

Overall, the research paper's approach could be a valuable tool for investigative journalists looking to analyze and investigate crimes in urban areas. However, it is essential to consider ethical concerns and potential biases when using this technology and ensure that it is used responsibly and transparently.

Conclusion

Both research papers utilize object detection and deep learning techniques to analyze images and videos for crime-related content. However, there are some key differences in their approaches and potential applications in investigative journalism.

The first paper focuses on predicting crime using object detection and deep learning techniques. The authors used a large dataset of images containing firearms and bladed weapons to train their models to accurately identify such objects. The models were then used to predict the likelihood of crime in new images and videos. This approach could potentially be useful in investigative journalism by aiding in the identification of weapons or other criminal activity in photos or videos that may otherwise go unnoticed.

On the other hand, the Lerf platform is designed to automatically detect and redact personally identifiable information (PII) in images and videos. This technology could be useful in investigative journalism by ensuring the protection of sources, victims, and other individuals' identities in sensitive or potentially dangerous situations. The platform could also streamline the process of anonymizing images and videos for publication.

Overall, both technologies have potential applications in investigative journalism, but they approach the problem from different angles. The first paper focuses on predicting crime, while the Lerf platform focuses on protecting individuals' privacy in images and videos.

References:

The website at lerf.io, which showcases a research lab from Nvidia, that specializes in deep learning and computer vision techniques for video analysis and understanding.
https://www.lerf.io/

"Image and video-based crime prediction using object detection and deep learning" by Tanushree Chaudhuri and Sanjay Kumar Dubey, published on ResearchGate.
https://www.researchgate.net/publication/367117965_Image_and_video-based_crime_prediction_using_object_detection_and_deep_lea