A survey of artificial intelligence strategies for automatic detection of sexually explicit videos

J. Cifuentes Quintero; A.L. Sandoval Orozco; L.J. García Villalba

Abstract-

Digital forensics and analysis have emerged as a discipline to fight against cyber and computer-assisted crime. In particular, taking into account the increasing of unconstrained pornographic content over Internet and the spreading cases of Child Sex Abuse material distribution, there is a growing need of efficient computational tools to automatically detect or/and block pornographic videos. The primary objective of this study is to review the different strategies available in the literature for pornography detection in videos and identify research gaps. This survey shows that deep learning based techniques detect videos with sexually explicit content more accurately compared with other conventional detection strategies. The accuracy of the strategies reported in this work, is found to be dependent on features extraction techniques, architecture, and learning algorithms. Finally, further research areas in pornographic video detection are outlined.

Index Terms- Sexually explicit content detection \cdot Video classification \cdot Digital forensics \cdot Deep learning \cdot Motion features \cdot Visual information analysis

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