

# Identifying the Pornographic Video on YouTube Using Vlog Stream

**Md Kamrul Islam**

Faculty of Computer Systems  
and Software Engineering  
Universiti Malaysia Pahang  
Pahang, Malaysia  
[polash2k4@gmail.com](mailto:polash2k4@gmail.com)

**Md Manjur Ahmed**

Faculty of Computer Systems  
and Software Engineering  
Universiti Malaysia Pahang  
Pahang, Malaysia  
[manjur@ump.edu.my](mailto:manjur@ump.edu.my)

**Kamal Zuhairi Zamli**

Faculty of Computer Systems  
and Software Engineering  
Universiti Malaysia Pahang  
Pahang, Malaysia  
[kamaz@ump.edu.my](mailto:kamaz@ump.edu.my)

## **Abstract:**

Today, YouTube is the most used platform for sharing videos from individual to organizations. Along with the sharing videos, YouTube creates a social networking platform by allowing sharing of feelings, views, and opinions about a video called vlog. It also allows uploading of videos of all ages (child, young and old people). YouTube has its policy for defining age-restricted content on YouTube. But a lot of uploaded videos are not marked as age restricted though they actually contain pornographic contents. YouTube has a team for reviewing the video content upon receiving a report from the user only. All the existing methods identify the pornographic video based on the visual or audio-visual features of video. However, there is no automatic method exist the author aware of identifying them based on vlogger sentiment. Thus, the challenge of automatically detecting this kind of video content is significant in applications like content filtering, detection of illegal content, etc. In this paper, we present an automatic method for identifying the pornographic content on YouTube based on the vlog stream. The experiment has been executed on both the age-restricted vlog stream and non-restricted vlog stream to validate the proposed method. The experimental result shows the effectiveness of the proposed methodology with nearly 80% accuracy.

**Keywords:** YouTube; Pornographic content; Vlog stream; Sentiment analysis

## **ACKNOWLEDGMENT**

This research work was supported by The Ministry of Higher Education (MoHE), Malaysia through The Fundamental Research Grant Schemes (Grant no. RDU 170395 and RDU 190184). The author would like to acknowledge Universiti Malaysia Pahang (UMP), Malaysia for the partial support through another research grant (Grant no. RDU 170103).