

Aalto University
School of Science
Bachelor's Programme in Science and Technology

Utilisation of viewing statistics in detecting NPVR closing credits

Bachelor's Thesis

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ABSTRACT OF
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1 Introduction

2 Background

2.1 Video content detection

2.2 Methods

2.3 Validation

3 Research

3.1 Baseline solution

The simplest method for finding where the closing credits are is to have a human look at the recording. The accuracy of other methods can be measured by comparing their output to this.

Plotting the cumulative user viewing behaviour typically produces a graph that shows a clear pattern, where there is a recess on the beginning and end, and depending on the program, one or a couple recesses in the middle. Checking few recordings by hand, it seems that the recesses match to the non-core-content of the program, that is things before and after the program and ad breaks.

To illustrate this, the viewer count of a soap opera episode is visualised in figure [1](#) with a sample of one hundred viewings. I have checked the beginning and ending timestamps of the intro, ad break and outro. The intro, ad break and outro are highlighted in red on the graph. They match the steep changes in viewer count.

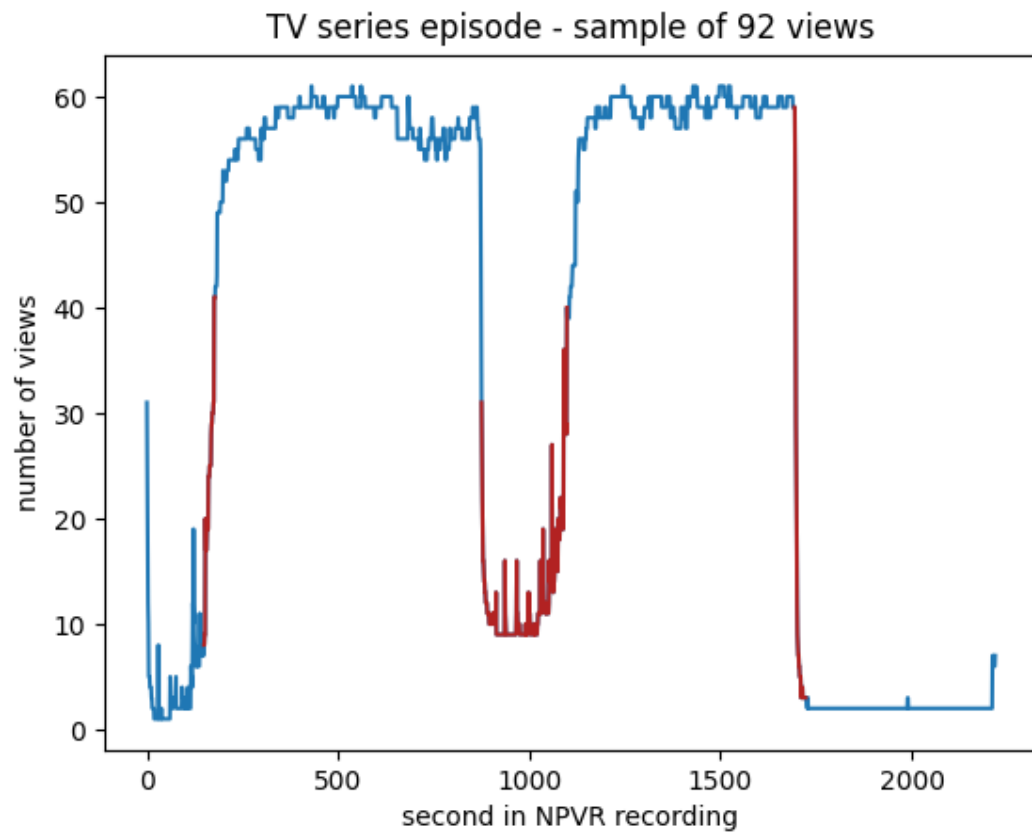


Figure 1: Example visualisation of user viewer count

3.2 Dataset

3.3 Other solution

4 Results

5 Conclusions

References