Paper Summary and Critique

Buffer Awareness Neural Adaptive Video Streaming for Avoiding Extra Buffer Consumption

Name	Student ID	Course	Lecture #
Sahil Pattni	40216177	COMP 691	3

Summary

The paper introduces a novel deep-learning solution that attempts to minimize buffer-waste (when a portion of the video is buffered but left un-watched). The solution - **DeepBuffer** controls the maximum buffer size and the bitrate for the next chunk of the video to be streamed, in order to achieve this.

Strengths

- On fast network paths, DeepBuffer can reduce the average buffer size by approximately 90%.
- Manages the next chunk's bitrate and the buffer size in tandem to optimize QoE.

Weaknesses

- The authors do not directly address the limitations of their work.

Applicability to practice

- Reducing buffer usage while maintaining QoE will be financially beneficial to large-scale video streaming platforms such as YouTube and Netflix.