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## A Model of Web Page Classification using Convolutional Neural Network (CNN): A Tool to Prevent Internet Addiction

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## Abstract

Game and Online Video Streaming are the most frequently visited web pages. Internet addiction may be negatively impacted by users who spend too much time on these types of web pages. Access to Game and Online Video Streaming web pages needs to be limited in order to combat the issue of internet addiction. Therefore, a tool that can categorize incoming web pages based on their content is required. This paper is proposing a web page classification model using a Convolutional Neural Network (CNN) to classify the web page whether it is a Game or Online Video Streaming based on the pattern of words in the word cloud image generated from the web page text content. The proposed web page classification model has achieved 85.6% accuracy.

*Keywords*: Web page classification; Deep learning; Convolutional neural network; Word cloud image; Internet addiction.