Can Machine-Learning Methods Detect Inappropriate Internet Behavior?

Chen-Huei Chou

School of Business, College of Charleston, USA

Abstract:

Due to the Internet's popularity, various services are reachable at work. In most workplaces, employees may use the Internet to do personal shopping, web surfing, chatting, gaming, social media, streaming, investment, illegal downloads, pornography, gambling, etc. Such activities cause production and Internet bandwidth loss and increase cyber security risks for the companies. Popular ways adopted by companies to address the issues include the enhancement of Internet use policy, training, and monitoring. Commercial Internet filtering software is one of the most popular and acceptable resolutions among these solutions. The disadvantage of such products is that they rely on blacklists, whitelists, and keyword matching, which require a lot of effort to maintain. This study proposed a machine-learning approach to detect inappropriate web pages loaded in the workplace.