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## Neuro-Physiological porn addiction detection using machine learning approach (Article) (Open Access)

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### Abstract

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Pornography is a portrayal of sexual subject contents for the exclusive purpose of sexual arousal that can lead to addiction. The Internet accessibility has created unprecedented opportunities for sexual education, learning, and growth. Hence, the risk of porn addiction developed by teenagers has also increased due to highly prevalent porn consumption. To date, the only available means of detecting porn addiction is through questionnaire. However, while answering the questions, participants may suppress or exaggerate their answers because porn addiction is considered taboo in the community. Hence, the purpose of this project is to develop an engine with multiple classifiers to recognize porn addiction using electroencephalography signals and to compare classifiers performance. In this work, three different classifiers of Multilayer Perceptron, Naive Bayesian, and Random Forest are employed. The experimental results show that the MLP classifier yielded slightly better accuracy compared to Naive Bayes and Random Forest classifiers making the MLP classifier preferable for porn addiction recognition. Although this work is still at infancy stage, it is envisaged for the work to be expanded for comprehensive porn addiction recognition system so that early intervention and appropriate support can be given for the teenagers with pornography addiction problem. Copyright © 2019 Institute of Advanced Engineering and Science. All rights reserved.

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