Abstract

The Internet is one of the most influential new communications technologies that have been affected both social and health aspects of users' lives. Despite many advantages and its positive pointes in communication, the excessive use of Internet make a serious danger that has adverse impacts on overall health. The inability of individuals to control the Internet use has been defined as Internet Addiction (IA). There are a lot of studies on IA over the topics of diagnosis, phenomenology, epidemiology, and treatment based on statistical analysis, but a few research works are conducted by machine learning techniques. So our research focuses on diagnosing and counseling to prevent IA by developing prediction models based on ensemble method with machine learning algorithms and finding the most important risk factors in diagnosing the status of users' IA. Experiment results demonstrate that this hybrid machine learning model by considering students field and location along with items 1, 3, 4, 5, 10, 12, 14, 15, 19, 20 from Internet Addiction Test (IAT) as the most important risk factors can identify the status of users' IA with 99.75% accuracy attains a performance superior to traditional single classifier systems.
References

An Artificial Predictive Modeling Framework for Automatically Detecting Problematic Use of Internet


**Index Terms**

| Computer Science | Artificial Intelligence |

**Keywords**

Internet Addiction, Machine Learning, Particle Swarm Optimization, Firefly Algorithm, K nearest Neighbor.