

Detecting malicious web pages

October 16 2019, by David Bradley



Credit: CC0 Public Domain

There is a lot of malware on the internet, unwitting computer users might be enticed to visit web pages serving such malicious content and as such there is a pressing need to develop security systems that can quickly detect such malicious websites and protect users from having their personal and private data scraped, their logins and bank details assimilated, or their computer or mobile device hijacked for the nefarious purposes of third party criminals.

A new paper from Dharmaraj Patil and Jayantrao Patil the Department of Computer Engineering, at the R.C. Patel Institute of Technology, in

Shirpur, Maharashtra, India, outlines a new approach to malicious web site detection based on feature [selection](#) methods and machine learning. The pair discusses details in the International Journal of High Performance Computing and Networking.

Their approach uses three modules: feature selection, training, and classification. To test the approach, the team used six feature selection methods and eight supervised machine learning classifiers and carried out experiments on the balanced binary dataset. With feature selection methods, they were able to detect malicious web content with an accuracy of between 94 and 99 percent and even above. The error rate was just 0.19 to 5.55%. They compared their results with eighteen well-known antivirus programs that also detect malicious [web pages](#) and found that the approach performed better than all of them.

More information: Dharmaraj R. Patil et al. Malicious web pages detection using feature selection techniques and machine learning, *International Journal of High Performance Computing and Networking* (2019). [DOI: 10.1504/IJHPCN.2019.102355](https://doi.org/10.1504/IJHPCN.2019.102355)

Provided by Inderscience

Citation: Detecting malicious web pages (2019, October 16) retrieved 18 April 2024 from <https://techxplore.com/news/2019-10-malicious-web-pages.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.