

Fuzzy Expert System to Detect Phishing in Websites

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1 Introduction

For this work, we

2 Task 1

To design the fuzzy expert system to detect phishing websites, we consulted [1]. In this paper, they list 87 possible features (boolean, floats and integers) that could matter in the detection of phishing websites.

2.1 Chosen Features

Chosen variables

We selected URL-based features, content features and external features

- Abnormal Subdomains (32) (boolean) - Domain Age (83) (int) - HTTPS token (25) (boolean) - Ratio external hyperlinks (59) (float) - Google Index (86) (boolean) - Page rank (87) (int)

2.2 Fuzzy Sets

2.2.1 Abnormal Subdomains

References

- [1] Abdelhakim Hannousse and Salima Yahiouche. “Towards benchmark datasets for machine learning based website phishing detection: An experimental study”. In: *Engineering Applications of Artificial Intelligence* 104 (2021), p. 104347. ISSN: 0952-1976. DOI: <https://doi.org/10.1016/j.engappai.2021.104347>. URL: <https://www.sciencedirect.com/science/article/pii/S0952197621001950>.