

# A Comparative Analysis of Logistic Regression, Support Vector Machines, and Random Forest for Phishing Website Identification

Publisher: IEEE

Cite This



Durga Prasad Garapati ; L V A Priya Maddipati ; K P Swaroop ; B. Samyuktha ; G. Hema Sowmya ; B. Hema Naga Valli [All Authors](#)

36  
Full  
Text Views



Abstract

Document Sections

- I. Introduction
- II. Proposed Framework and Methodology
- III. Results and Validation
- IV. Conclusion

Authors

Figures

References

Keywords

Metrics

More Like This

Abstract:

The effectiveness of Logistic Regression (LR), Support Vector Machines (SVM), and Random Forest (RF) in identifying phishing websites is evaluated in this study using a carefully selected dataset that includes both legitimate and fraudulent classes. The importance of the dataset in detecting various phishing indicators is highlighted in the research. After comparing each method, the research find that LR is the most straightforward and easy to understand, SVM is great at dealing with complicated decision boundaries, and RF is the best at preventing overfitting. In light of the ever-changing nature of cybersecurity threats, this research should help practitioners make more informed decisions when choosing algorithms to identify phishing attempts.

Published in: [2024 International Conference on Computational Intelligence for Green and Sustainable Technologies \(ICCIGST\)](#)

Date of Conference: 18-19 July 2024

DOI: [10.1109/ICCIGST60741.2024.10717628](#)

Date Added to IEEE *Xplore*: 23 October 2024

Publisher: IEEE

► ISBN Information:

Conference Location: Vijayawada, India

Sign in to Continue Reading

Authors

[Durga Prasad Garapati](#)  
Department of Artificial Intelligence, Shri Vishnu Engineering College for Women, Bhimavaram, India

[L V A Priya Maddipati](#)  
Department of Artificial Intelligence, Shri Vishnu Engineering College for Women, Bhimavaram, India

[K P Swaroop](#)  
Department fo EEE, Shri Vishnu Engineering College for Women, Bhimavaram, India

[B. Samyuktha](#)  
Department of Artificial Intelligence, Shri Vishnu Engineering College for Women, Bhimavaram, India

[G. Hema Sowmya](#)  
Department of Artificial Intelligence, Shri Vishnu Engineering College for Women, Bhimavaram, India

[B. Hema Naga Valli](#)



Figures	▼
References	▼
Keywords	▼
Metrics	▼

IEEE Personal Account

CHANGE  
USERNAME/PASSWORD

Purchase Details

PAYMENT OPTIONS  
VIEW PURCHASED  
DOCUMENTS

Profile Information

COMMUNICATIONS  
PREFERENCES  
  
PROFESSION AND  
EDUCATION  
  
TECHNICAL INTERESTS

Need Help?

US & CANADA: +1 800  
678 4333  
  
WORLDWIDE: +1 732  
981 0060  
  
CONTACT & SUPPORT

Follow

[f](#) [@](#) [in](#) [v](#)