ABSTRACT

Phishing Email Detection Using Improved RCNN Model With Multilevel Vectors And Attention Mechanism

The phishing Email is one of the significant threats in the world today and has caused tremendous financial losses. In this paper first analyzed the email structure then based on an improved Recurrent Convolutional Neutral Networks (RCNN) model with multilevel vectors and attention mechanism, proposed a new phishing email detection model named THEMIS, which is used to model emails at the email header, the email body, the character level, and the word level simultaneously. Attention mechanism is used in the header and the body, making the model pay more attention to the more valuable information between them. In this paper, emails are divided into two categories, legitimate emails and phishing emails. Our goal is to detect whether the target email is legitimate or phishing quickly and accurately.