

Classifying Malware Using Convolutional Gated Neural Network

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Abstract— Malware or Malicious Software, are an important threat to information technology society. Deep Neural Network has been recently achieving a great performance for the tasks of malware detection and classification. In this paper, we propose a convolutional gated recurrent neural network model that is capable of classifying malware to their respective families. The model is applied to a set of malware divided into 9 different families and that have been proposed during the Microsoft Malware Classification Challenge in 2015. The model shows an accuracy of 92.6% on the available dataset.

Keyword— Malware, Machine Learning, Neural Network, Deep Neural Network, CNN, Gated Recurrent Unit



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