## **Abstract**

Internet now has become inseparable part of our lives today. Since the development of the Internet as well, the risk of attacks that occurred on the network will also be greater. To prevent and reduce the number of attacks that occurred then it should be done on a traffic analysis that occurs on a computer network. However, because it amounted to so much traffic, it will be very difficult if done manually analysis. That's why we need a effective method and in accordance with the workings of the network forensic experts to analyze the network itself.

One of the methods that can be used to perform the detection of this attack is the Artificial Neural Network which is suitable for classification in this case is the classification of an attack or not. The method used is a Recurrent Neural Network (RNN) which can analyze the attack happened and also evidence extraction. RNN will be applied to the log file, where the log file itself is a file that records user access to wireless service providers access channel.

The result of this research is that the RNN method, the detection analysis can be done with effective network attacks, as evidenced by the lowest average accuracy was 94% and the highest is 98.67%.

Keywords: network forensic, RNN, log file