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Introduce a New Model of Anomaly Detection in Computer Networks Using Artificial Immune Systems

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Abstract : The fundamental component of the computer network of modern information society will be considered. These networks are connected to the network of the internet generally. Due to the fact that the primary purpose of the Internet is not designed for, in recent decades, none of these networks in many of the attacks has been very important. Today, for the provision of security, different security tools and systems, including intrusion detection systems are used in the network. A common diagnosis system based on artificial immunity, the designer, the Adhasaz Foundation has been evaluated. The idea of using artificial safety methods in the diagnosis of abnormalities in computer networks it has been stimulated in the direction of their specificity, there are safety systems are similar to the common needs of m, that is non-diagnostic. For example, such methods can be used to detect any abnormalities, a variety of attacks, being memory, learning ability, and Khodtnzimi method of artificial immune algorithm pointed out. Diagnosis of the common system of education offered in this paper using only the normal samples is required for network and any additional data about the type of attacks is not. In the proposed system of positive selection and negative selection processes, selection of samples to create a distinction between the colony of normal attack is used. Copa real data collection on the evaluation of ij indicates the proposed system in the false alarm rate is often low compared to other ir methods and the detection rate is in the variations.

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