ISSN Online: 2771-8948

Website: www.ajird.journalspark.org

Volume 28, May - 2024

INFORMATION SECURITY MODELS

Kadirov Kamoliddin Kadirjon ugli Alisher Navoi Tashkent State University of Uzbek Language and Literature, 3rd Year Bachelor's Degree in Computer Linguistics

Abstact

Information security models are structures of various algorithms and technologies that are of great importance in the field of cyber security. These models, including modern technologies such as Machine Learning (ML) and Artificial Intelligence (AI), are widely used in solving information security problems. There are also statistical models, encryption algorithms, and mathematical models that can be used to analyze and prevent information security problems. This annotation provides an overview of the types of information security models and their main important features.

Keywords: Information security, Security models, Security analysis, Remote learning, Cybersecurity, Mechanical models, Mathematical models, Modern information security models, Product security, Algorithmic security, Automated analysis, Security enhancement, Network security monitoring.

Introduction

Information security models play a major role in cybersecurity. These models are created through different algorithms and technologies. One of them are the Machine Learning (ML) and Artificial Intelligence (AI) models. There are also statistical, encryption algorithms and math models. Models are widely used to solve cybersecurity issues. Their practice and problems can be of different types. Analyzing and combating models is one of the main guidelines for overall development. The next step will be implemented directly to updates and problems in the field of security improvements and cybersecurity using these models. Information Security Models and Their Problems: Information Security, a significant topic in today's cyber security world, has many problems in creating and combating security models.

Security Models: Understanding and Category: Includes Security Models, Algorithms of various types of mathematical and mechanical types, ML algorithms and modern technology. These models are designed for various industries, such as network security, product security, and personal information security.

Information Security For Security Three Security Models: This section provides insight into how security models apply to different industries. For example, automated analytics models or algorithmic analysis models for product safety can be cited for network security monitoring.

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org

Volume 28, May - 2024

Model Research and Analysis: An analysis of information security models explains how they work and their boundaries and advantages. In this section, mathematical models, ML algorithms and modern information security models will be discussed.

Security Models: The Road to Security Strengthening

Information security is an important area that plays a major role in solving today's cyber security issues, making it necessary to create security models and look for innovative solutions to combat them. Security models, including mathematics, mechanics, and modern technologies, are various algorithms and methods. These models serve as key tools for security analysis and security enhancement.

Security models use different kinds of analytics techniques to solve a strong problem in cyber-security. Some models are based on classical mathematical and mechanical principles, such as statistical models or encryption algorithms. Others are based on modern technologies such as Machine Learning (ML) and Artificial Intelligence (AI). ML and AI from experienced, helps analyze cyber documents, identify malicious activities, and improve security.

Security models can be created specifically for different industries. For example, there are models for network security monitoring, as well as other models that are used for product safety. Each model can have its own specific advantages and limits.

The primary purpose of analyzing such an important topic is to provide insight into the structure and practice of security models and to teach them how they can be used. This plays a key role in creating innovations and advanced methods in the field of cyber-security.

Operations: Implementing Information Security

Practices play a major role in implementing information security models. This section provides details on how models and algorithms are used to solve cybersecurity issues in the current state. This section may cover the following important points:

Application of Machine Learning and Artificial Intelligence Algorithms: Information is provided on how the Machine Learning (ML) and Artificial Intelligence (AI) models are used to solve the problems of cybersecurity. These algorithms play a major role in identifying harmful activities, analyzing cyber-atakas and encrypted data.

Network Security Monitoring: An analysis of how to use ML and AI models to monitor the security of information networks. At the same time, the importance of monitoring network security and encrypted messages, network applications, and the application of ML and AI algorithms will be indicated in analyzing the level of security.

Poisoning Detection: With the help of ML and AI algorithms, an understanding of how it is used to combat poisoning is given. Analysis of the role and implementation of security models in the detection of poisoning, problems in malicious code, and safety entities will be analyzed.

Security Applications: You will be informed about the specific applications and methods used to enhance and support security. For example, broader anti-poisoning network

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org

Volume 28, May - 2024

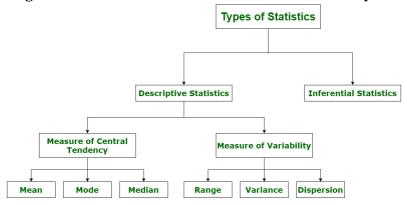
apparatus, data-papering methods, and technical measures are provided to enhance security.

This section is important in solving problems in the cyber-security field, as it describes advanced ways to implement models and helps with advanced analysis experience.

Security Models for Information Security

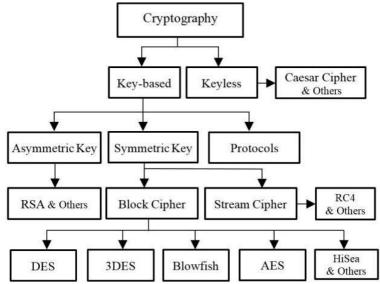
Information Security For Security Models: aims to describe the models used to solve information security issues and their basic concepts. This section covers the following points:

Statistical Models: This section explains how classical statistical models are used to solve their information security problems. For example, how statistical models work in combating poisoning, evaluating user identification and the information security of realized transfers.



Encryption Algorithms:

Part of the security models are encryption algorithms. They are designed to protect the data and serve as the primary means of security. Encryption algorithms play a crucial role in protecting data, enhancing security, and protecting data.



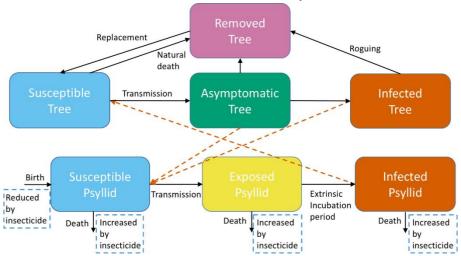
ISSN Online: 2771-8948

Website: www.ajird.journalspark.org

Volume 28, May - 2024

Machine Learning and Artificial Intelligence Models: Machine Learning (ML) and Artificial Intelligence (AI) models play a major role in the field of information security, which is used in a timely manner to combat poisoning, detect malware, and improve safety levels. ML and AI are tools that are important in the study and development of security models.

Mathematical models: Mathematical models are used to solve many problems in the field of information security. These models are based on the mathematical basis of security and play a major role in the structure of information security.



This section helps explain the different models and their basic concepts to solve information security issues. This will help in the search for innovative solutions and solve problems in the field of information security.

This article outlines information security models and their important role in cybersecurity. Models are created through a variety of algorithms and technologies and are widely used to solve information security problems. These models also include the use of modern technologies such as Machine Learning (ML) and Artificial Intelligence (AI). There are also statistical, encryption algorithms and math models. The substance will help analyze the practice of models and their problems. Analyzing and combating models is one of the main guidelines for direct implementation to innovations and problems in the cyber-security industry. Therefore, information security models play a major role in solving important cyber security problems and implementing their innovations.

References

- 1. Seymour Bosworth, Michel Ye. Kabay, Eric Whyne. Computer security
- 2. handbook. Wiley.2014.
- 3. Shon Harris. ALL IN ONE CISSP. McGraw-Hill 2013.
- 4. G 'aniev S. K., Karimov M. M., Tashev K. A. J Information Security. Contactor.
- 5. 2008.
- 6. Makarenko S. I., Informatsionnaya bezopasnost. Uchebnoe posobie. Stavropol
- 7. 2009.

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org

Volume 28, May - 2024

- 8. Michael Ye. Whitman. Herbert J. Mattord. Principles of Information Security,
- 9. Fourth Edition. Course Technology, Cengage Learning. 2012.

Internet sites:

- 1. www.intuit.ru
- 2. www.sec.ru
- 3. http7/opensecuritvtraining.info/