

UNIVERSIDAD DE LAS FUERZAS ARMADAS ESPE



Departamento de Ciencias de la Computación

Lectura y Escritura de Textos Académicos

Tema:

Revisión de Literatura

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Artículos primarios

Para la selección de los 30 artículos primarios se realizó en 3 diferentes herramientas de búsqueda académica: IEEE explorer, Scopus y Web of science.

Además, se utilizó el gestor bibliográfico Mendeley en el que nos encontramos los 3 compañeros que realizamos la búsqueda bibliográfica:

The screenshot shows the Mendeley software interface. On the left, there's a sidebar with options like 'Watched Folder', 'Formatted Citation Style', and 'Groups'. A red box highlights the 'Groups' section, which lists 'LecturaYEscritura' as the current group. The main area displays the group's details, including its owner (Mateo Medranda), creation date (31/10/2025), and member count (3). Below this is a table of 30 academic articles, each with columns for 'SOURCE', 'ADDED', and 'FILE'. The articles cover topics such as 'Learning Attacks and Defenses in Cybersecurity Systems', 'A Deep Learning Framework for Real-Time Network Security', and 'An Intelligent Intrusion Detection System in Cloud Computing'. At the bottom of the table, it says '30 references selected'.

Ilustración 1: Grupo de trabajo en Mendeley para la clasificación de Artículos académicos, con los 3 integrantes del equipo.

En Mendeley se llevó a cabo la clasificación y organización de los 30 documentos seleccionados, con el propósito de facilitar su análisis en la sabana de contenido.

This screenshot shows the Mendeley desktop application's main interface. On the left, there's a sidebar with 'Recently Added', 'Recently Read', 'Favorites', 'My Publications', 'Unsorted', 'Duplicates', and 'Trash'. Below that is a 'COLLECTIONS' section with 'L & E' and 'Tendencias en SW', and a 'GROUPS' section with 'Investigación' and 'LecturaYEscritura'. A red box highlights the 'LecturaYEscritura' group. The main area shows a table of 30 selected references, with columns for 'AUTHORS', 'YEAR', 'TITLE', 'SOURCE', 'ADDED', and 'FILE'. The references are from various sources like IEEE Access, Big Data and Analytics, Swarm and Evolutionary Computation, and Applied Sciences. At the bottom, it says '30 references selected'.

Ilustración 2: Representación de los 30 artículos académicos primarios.

En la siguiente tabla se observa una lista de todos los artículos que se han considerado dentro de la revisión de literatura.

Tabla 1.

Lista de artículos para revisión de literatura de forma sistemática

#	Título	Año
1	Re-Evaluating Deep Learning Attacks and Defenses in Cybersecurity Systems	2024
2	Traffic Feature Selection and Distributed Denial of Service Attack Detection in Software-Defined Networks Based on Machine Learning	2024
3	A Deep Learning Approach for Intrusion Detection Systems in Cloud Computing Environments	2024
4	A Flow-Based Anomaly Detection Approach With Feature Selection Method Against DDoS Attacks in SDNs	2022
5	Performance comparison analysis of classification methodologies for effective detection of intrusions	2024
6	Assessing the effectiveness of dimensionality reduction on the interpretability of opaque machine learning-based attack detection systems	2024
7	A Novel Hybrid Convolutional-Attention Recurrent Network (HCARN) for Enhanced Cybersecurity Threat Detection	2025
8	A Self-Adaptive Intrusion Detection System for Zero-Day Attacks Using Deep Q-Networks	2025
9	Enhancing 5G Network Security: A Deep Learning Framework for Real-Time DDoS Detection and Explainable Threat Analysis	2025
10	Network Packet Transformation Approaches for Intrusion Detection Systems: A Survey	2025
11	GTAE-IDS: Graph Transformer-Based Autoencoder Framework for Real-Time Network Intrusion Detection	2025
12	Few-Shot Class-Incremental Learning for Network Intrusion Detection Systems	2024
13	TANTRA: Timing-Based Adversarial Network Traffic Reshaping Attack	2022
14	Design and Development of a Deep Learning-Based Model for Anomaly Detection in IoT Networks	2021
15	Machine Learning for Misuse-Based Network Intrusion Detection: Overview, Unified Evaluation and Feature Choice Comparison Framework	2021
16	Benchmarking of Machine Learning for Anomaly Based Intrusion Detection Systems in the CICIDS2017 Dataset	2021
17	A Comprehensive Survey of Databases and Deep Learning Methods for Cybersecurity and Intrusion Detection Systems	2021
18	A DDoS attack detection method based on improved transformer and temporal feature enhancement	2025
19	QoS-Aware cloud security using lightweight EfficientNet with Adaptive Sparse Bayesian Optimization	2025
20	Adaptive Hybrid Information Gain and Autoencoder-Based Feature Selection with Ensemble Recurrent Extreme Learning Machine for Enhanced Network Intrusion Detection Systems	2026
21	An Intelligent Intrusion Detection System in IoV Using Machine Learning and Deep Learning Models	2025

22	Intrusion detection and classification using deep belief networks with feature reduction	2025
23	Anomalous Network Traffic Detection Method Based on an Elevated Harris Hawks Optimization Method and Gated Recurrent Unit Classifier	2022
24	Deep Convolutional Neural Network for Active Intrusion Detection and Protect data from Passive Intrusion by Pascal Triangle	2024
25	DDoS attack detection and mitigation using deep neural network in SDN environment	2024
26	A systematic review of metaheuristics-based and machine learning-driven intrusion detection systems in IoT	2025
27	Performance comparison analysis of classification methodologies for effective detection of intrusions	2024
28	SE-DWNet: An Advanced ResNet-Based Model for Intrusion Detection with Symmetric Data Distribution	2025
29	Network Intrusion Detection Based on Deep Belief Network Broad Equalization Learning System	2024
30	Federated learning and explainable AI-driven intrusion detection with hyperband optimization	2025