

Name: Rahmeh Ibrahim

**Bio:** Rahmeh Ibrahim is a Ph.D. student specializing in Cryptography, Artificial Intelligence (with a focus on metaheuristic optimization), and Blockchain-based cybersecurity solutions. She holds a Master's degree in Cybersecurity and Digital Criminology from Princess Sumaya University for Technology (PSUT) and a Bachelor's degree in Computer Science from the University of Jordan. Currently, she serves as a cybersecurity instructor at Al Hussein Technical University (HTU), where she is actively engaged in both teaching and research. Prior to her academic role, she gained over five years of professional experience as a full stack developer in the business sector. Her research interests include AI-driven cryptographic systems, optimization-based security models, and decentralized cybersecurity frameworks using blockchain technology.

## **Published papers:**

**Ibrahim**, **R**., Ghnemat, R. and Abu Al-Haija, Q., 2023. Improving Alzheimer's disease and brain tumor detection using deep learning with particle swarm optimization. *AI*, *4*(3), pp.551-573.

**Ibrahim, Rahmeh Fawaz**, Aseel Mohammad Elian, and Mohammed Ababneh. "Illicit account detection in the ethereum blockchain using machine learning." In 2021 international conference on information technology (ICIT), pp. 488-493. IEEE, 2021.

Qattous, Hazem, Mohammad Azzeh, **Rahmeh Ibrahim**, Ibrahim Abed Al-Ghafer, Mohammad Al Sorkhy, and Abedalrhman Alkhateeb. "PaCMAP-embedded convolutional neural network for multi-omics data integration." Heliyon 10, no. 1 (2024).

**Ibrahim, Rahmeh Fawaz**, Qasem Abu Al-Haija, and Ashraf Ahmad. "DDoS attack prevention for internet of thing devices using ethereum blockchain technology." Sensors 22, no. 18 (2022): 6806.

**Ibrahim, R.F.** and Qusef, A., 2024, December. Software Bug Count Prediction Using Abstract Syntax Trees (ASTs). In Proceedings of the 2024 13th International Conference on Software and Information Engineering (pp. 39-45).

Saif, A., **Ibrahim, R.**, Almajali, S. and Salameh, H.B., 2024, September. Data-Driven Unified Channel Modeling of WiFi and LiFi Using Conditional GAN. In *2024 International Conference on Intelligent Computing, Communication, Networking and Services (ICCNS)* (pp. 215-219). IEEE.

Al-Haija, Q.A. and **Ibrahim, R**., 2023. Introduction to dark web. In *Perspectives on Ethical Hacking and Penetration Testing* (pp. 114-138). IGI Global.

**Ibrahim, R**. and Al-Haija, Q.A., 2024. Blockchain Security Measures to Combat Cyber Crime. In *Cyber Security for Next-Generation Computing Technologies* (pp. 275-293). CRC Press.

**Ibrahim, R**. and Al-Haija, Q.A., Fundamentals of Machine Learning Models. In *Advances in AI for Simulation and Optimization of Energy Systems* (pp. 1-17). CRC Press.

### Accepted, not yet published papers:

Steganalysis in the Spatial Domain: Improving VGG19 Performance Using Particle Swarm Optimization Algorithm

A Novel Genetic Algorithm-Optimized Selective Encryption for Enhanced Privacy in Medical Imaging

### Submitted papers:

Paper Title	Authors	Venue
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PSO-RT: A Particle Swarm Optimization	Rahmeh Ibrahim, Amer albadarneh, qasem abu alhaija	Journal
Algorithm for Enhancing R-Tree Spatial		
Indexing		

# **Research Interests:**

Cryptography Artificial Intelligence (Metaheuristic Optimization) Cybersecurity Solution Using Blockchain

#### **Paper Reviews:**

Venue Type	Venue Title	#papers
Conference	ICICS2024	2
Conference	IJCC 2024	4
Conference	ICIT2025	2

# **Important Links:**

LinkedIn: https://www.linkedin.com/in/rahmeh-ibrahim-74391a338/

Google Scholar: <u>https://scholar.google.com/citations?user=VU5IqlcAAAAJ&hl=en&oi=ao</u>

Research Gate: https://www.researchgate.net/profile/Rahmeh-Ibrahim