Ibrahim A. Fares

PhD in Artificial Intelligence & Machine Learning

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Google Scholar: https://scholar.google.com/citations?user=G33DEsgAAAAJ

Research Interests

Machine Learning, Deep Learning, Natural Language Processing (NLP), LLMs, LLM Finetuning, Gen AI, Optimization Algorithms, Cybersecurity, IoT, and Federated Learning.

Education

PhD in Optimizing ML for Cybersecurity

Title: Cyber Security Threats Detection in Internet of Things Based on Optimization Algorithms Zagazig University, Egypt (2021-2024)

Master's in Using Optimization algorithms for IoT application

Title: Bio-Inspired Algorithms for Optimizing Dynamic Noisy Environment in Smart Cities Zagazig University, Egypt (2018-2020)

BSc in Math. & Computer Science

Zagazig University, Egypt (2012-2016)

Academic Experience

LecturerAssistant LecturerAssistant Teacher(2024-Present)(2021-2024)(2016-2021)Zagazig UniversityZagazig UniversityZagazig University

Publications

2025

1. Diagnosing Autism Spectrum Disorder Based on Modified Deep Learning and Feature Selection Technique, Under Review.

2024

- M. Abd Elaziz, I. A. Fares and A. O. Aseeri, "CKAN: Convolutional Kolmogorov–Arnold Networks for IoT Intrusion Detection," IEEE Access, vol. 12, pp. 134837-134851, 2024, doi: 10.1109/ACCESS.2024.3462297.
- 3. TFKAN: Transformer Based on Kolmogorov–Arnold Networks for Intrusion Detection in IoT, Egyptian Informatics Journal, Under Review.
- 4. Explainable TabNet Transformer-Based on Google Vizier Optimizer for Intrusion Detection, Knowledge-Based Systems, Under Review.
- 5. Federated Learning Framework for IoT Intrusion Detection Using Tab Transformer and Nature-Inspired Hyper-Parameter Optimization, Frontiers in Big Data, Under Review.
- 6. Deep Transfer Learning based on Hybrid Swin Transformers with LSTM for Intrusion Detection Systems in IoT Environment, IEEE Access, Under Review.

2023

- 1. FT Transformer for Intrusion Detection System in IoT, Bulletin of Faculty of Science, Zagazig University, Accepted.
- Ibrahim Fares, Aboul Ella Hassanien, Rizk M. Rizk-Allah, Roushdy Mohamed Farouk and Hassan Mostafa Abo-donia, Solving Capacitated Vehicle Routing Problem with Route Optimisation Based on Equilibrium Optimiser Algorithm, International Journal of Computing and Mathematics, Jan 2023.

2020

1. I. Fares, Rizk M. Rizk-Allah, Aboul Ella Hassanien & Snasel Vaclav, Multiple Cyclic Swarming Optimization for Uni- and Multi-modal Functions, International Conference on Innovative Computing and Communications, Jan 2020.

Technical Skills

AI & ML: Machine Learning, Deep Learning, NLP, Transformers, GenAI **Programming:** Python, C++, Java,

MATLAB

Data: SQL, NoSQL, Database Management

Web Development: HTML, CSS,

JavaScript, DevOps

Specializations: Optimization Algorithms,

Cybersecurity, IoT

References

Prof. Dr. Mohamed Abd Elaziz Ph.D. Supervisor

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Prof. Dr. Aboul Ella Hassanien M.Sc. Supervisor

Email: aboitcairo@gmail.com