# Ibrahim A. Fares

### PhD in Artificial Intelligence & Machine Learning

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**Phone:** (+2)01014399619 **Location:** Zagazig, Egypt

**Portfolio:** https://ifares-csi.github.io/

Google Scholar: <a href="https://scholar.google.com/citations?user=G33DEsgAAAAJ">https://scholar.google.com/citations?user=G33DEsgAAAAJ</a>

### **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

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