

Ibrahim A. Fares

PhD in Machine Learning & Cybersecurity

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Portfolio: <https://ifares-csi.github.io/> | Google Scholar: [Profile](#)

ACADEMIC POSITIONS

Assistant Professor (2025-Present)

Department of Cybersecurity, College of Engineering and Information Technology
Buraydah Private Colleges, Buraydah, 51418, Saudi Arabia.

Assistant Professor (2024-2025)

Faculty of Science, Zagazig University, Egypt

Assistant Lecturer (2021-2024)

Faculty of Science, Zagazig University, Egypt

Demonstrator (2016-2021)

Faculty of Science, Zagazig University, Egypt

RESEARCH INTERESTS

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|--|---|
| <ul style="list-style-type: none">• Machine Learning & Deep Learning• Natural Language Processing (NLP)• Large Language Models (LLMs)• LLM Fine-tuning & Prompt Engineering• Generative AI & Multimodal Models | <ul style="list-style-type: none">• Optimization Algorithms• Cybersecurity & Intrusion Detection• Internet of Things (IoT)• Federated Learning• Transformer Architectures |
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EDUCATION

PhD in Optimizing ML for Cybersecurity (2021-2024)

Zagazig University, Egypt Thesis: Cyber Security Threats Detection in Internet of Things Based on Optimization Algorithms.

Master's in Using Optimization algorithms for IoT application (2018-2020)

Zagazig University, Egypt Thesis: Bio-Inspired Algorithms for Optimizing Dynamic Noisy Environment in Smart Cities.

BSc in Math. & Computer Science (2012-2016) Zagazig University, Egypt

TEACHING EXPERIENCE

Teaching computer science subjects for 10 years, including:

AI & Machine Learning	Programming Languages	CS Fundamentals
<ul style="list-style-type: none">• LLMs• Machine Learning• Deep Learning• Natural Language Processing	<ul style="list-style-type: none">• Python• C++• MATLAB• Web Programming	<ul style="list-style-type: none">• Data Structures• Algorithms• Compiler Design• Data Mining• Computer Networks

PUBLICATIONS

2026

1. Seyam, E. A., Sadk, S. W., **Fares, I. A.**, & Attwa, R. A. E. (2026). *Forecasting Temperature Data for Two Counties in California Using the Stress–Strength Reliability of the MO q-GEVL Distribution: A Return Level Based Approach and Time Series*. Scientific African, 31, e03207. (**Q1**)
2. Mahmoud, N., Abd Elaziz, M., Dahou, A., Ghatasheh, M., **Fares, I.** A., & Al-Betar, M. A. (2026). *Enhancing Particle Swarm Optimization Based on Optical Computing Mechanism: Application to Dyslexia Detection*. Frontiers in Artificial Intelligence, 8, 1731997. (**Q2**)

2025

3. Fares, I. A., & Abd Elaziz, M. (2025). *Explainable TabNet Transformer-Based on Google Vizier Optimizer for Anomaly Intrusion Detection System*. Knowledge-Based Systems, 316, 113351. (**Q1**)
4. Fares, I. A., Abd Elaziz, M., Aseeri, A. O., Zied, H. S., & Abdellatif, A. G. (2025). *TFKAN: Transformer Based on Kolmogorov–Arnold Networks for Intrusion Detection in IoT Environment*. Egyptian Informatics Journal, 30, 100666. (**Q1**)
5. Fares, I. A., Abdellatif, A. G., Abd Elaziz, M., Shrahili, M., Elmahallawy, A., Sohaib, R. M., Shawky, M. A., & Shah, S. T. (2025). *Deep Transfer Learning Based on Hybrid Swin Transformers With LSTM for Intrusion Detection Systems in IoT Environment*. IEEE Open Journal of the Communications Society. (**Q1**)
6. Abd Elaziz, M., Fares, I. A., Dahou, A., & Shrahili, M. (2025). *Federated Learning Framework for IoT Intrusion Detection Using Tab Transformer and Nature-Inspired Hyperparameter Optimization*. Frontiers in Big Data, 8, 1526480. (**Q2**)
7. Fares, I. A., & Abd Elaziz, M. (2025). *FT-Transformer for Intrusion Detection in IoT Environment*. Bulletin of Faculty of Science, Zagazig University, 2025(1), 114-123.
8. Nafisah, I., Mahmoud, N., Ewees, A. A., Khattap, M. G., Dahou, A., Alghamdi, S. M., Fares, I. A., Al-Betar, M. A., & Abd Elaziz, M. (2025). *Deep Learning-Based Feature Selection for Detection of Autism Spectrum Disorder*. Frontiers in Artificial Intelligence, 8, 1594372. (**Q2**)
9. Dahou, A., Mahmoud, N. H., Nafisah, I., Abd Elaziz, M. A., Alghamdi, S. M., Ghatasheh, M., & Fares, I. A. (2025). *Enhanced Snow Geese Algorithm and Transformer Models for Dyslexia Detection*. Journal of Disability Research, 4(5), 20250746.

2024

10. Abd Elaziz, M., Fares, I. A., & Aseeri, A. O. (2024). *CKAN: Convolutional Kolmogorov–Arnold Networks Model for Intrusion Detection in IoT Environment*. IEEE Access, 12, 134837-134851. (**Q2**)

2023

11. Fares, I., Hassanien, A. E., Rizk-Allah, R. M., Farouk, R. M., & Abo-donia, H. M. (2023). *Solving Capacitated Vehicle Routing Problem with Route Optimisation Based on Equilibrium Optimiser Algorithm*. International Journal of Computing Science and Mathematics, 17(1), 13-27.

2020

12. Fares, I., Rizk-Allah, R. M., Hassanien, A. E., & Vaclav, S. (2020). *Multiple Cyclic Swarming Optimization for Uni- and Multi-modal Functions*. In International Conference on Innovative Computing and Communications: Proceedings of ICICC 2019, Volume 1 (pp. 887-898). Springer Singapore.

TECHNICAL SKILLS

AI & ML: Machine Learning, Deep Learning, NLP, Transformers, GenAI	Web Development: HTML, CSS, JavaScript, DevOps
Programming: Python, C++, Java, MATLAB	Specializations: Optimization Algorithms, Cybersecurity, IoT
Data: SQL, NoSQL, Database Management	

REFERENCES

Prof. Dr. Mohamed Abd Elaziz (*PhD supervisor*) Email: abd_el_aziz_m@yahoo.com

Prof. Dr. A.M. Elsawah Email: amelsawah@uic.edu.cn