Faris Hamdi Rizk

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My Website — Google Scholar — LinkedIn— Kaggle — GitHub

Professional Summary

Motivated and detail-oriented Undergraduate Research Assistant with experience in machine learning, metaheuristic optimization, and deep learning. Proven ability to conduct independent research, develop innovative algorithms, and collaborate effectively in diverse teams. Strong analytical skills and a passion for continuous learning.

Experience

Undergraduate Research Assistant   Jan. 2024 - Present
Machine Learning and Metaheuristics Optimization Lab — Prof.Sayed El-Kenawy, Delta Higher Institute of Engineering and Technology

- Conducted research on metaheuristic algorithms and their applications in machine learning.

Education

B.S. in Electronics and Communication Engineering   Sep. 2021 - Jul. 2026
Delta Higher Institute of Engineering and Technology, Mansoura 35111, Egypt

- Relevant Coursework: Programming, Data Structures, Algorithms, Probability & Statistics, Digital Signal Processing and Electronics Design.

Research Interests

- Deep Learning
- Computer Vision
- Optimization Algorithms

Technical Skills

- **Artificial Intelligence:** Machine Learning, Deep Learning, Computer Vision
- **Programming:** Python, C
- **Tools:** LaTeX, MATLAB, Jupyter Notebooks
- **Data Analysis:** Statistical Analysis, Data Visualization, Signal Processing

Core Competencies

- Analytical Thinking
- Problem Solving
- Team Work
- Curiosity and Continuous Learning
- Adaptability and Flexibility
- Self-Motivation

Volunteering Experience

Graphic Design Head Sep. 2021 - Present

Google Developer Student Club (GDSC), Delta Higher Institute of Engineering and Technology

- Led a team of 4 in designing graphics for club events, improving outreach by 30%.

- Organized workshops and events to promote graphic design skills among students.

Awards & Honors

- 2nd Place, GDG DevFest Mansoura Hackathon, Mansoura University, Egypt   Dec. 2023

Languages

- English (B2)

- Arabic (Native)

Publications

Conference Articles

- Abdelmalak M. E. S., Khodadadi N., Zaki A. M., Eid M. M., Rizk F. H., Ibrahim A., Abdelhamid A. A., Abualigah L., & El-Kenawy E.-S. M. (2024). *Pothole Detection in Asphalt Roads: A Comprehensive Approach for Enhanced Road Maintenance and Safety with AlexNet Model.* 2024 International Telecommunications Conference (ITC-Egypt), 269–274.

- Rizk F. H., Mohamed M. E., Sameh B., Zaki A. M., Eid M. M., & El-Kenawy E.-S. M. (2024). *Enhancing Student Performance Prediction with Greylag Goose Optimization Algorithm.* 2024 International Telecommunications Conference (ITC-Egypt), 32–37.

- Sherif K., Rizk F. H., Zaki A. M., Eid M. M., Khodadadi N., Ibrahim A., Abdelhamid A. A., Abualigah L., & El-Kenawy E.-S. M. (2024). *Revolutionizing Oil Spill Detection: A Machine Learning Approach for Satellite Image Classification.* 2024 International Telecommunications Conference (ITC-Egypt), 245–250.

Journal Articles

- Rizk F. H., Arkhstan S., Zaki A. M., Kandel M. A., & Towfek S. K. (2023). *Integrated CNN and Waterwheel Plant Algorithm for Enhanced Global Traffic Detection.* Full-Length Article, Volume 6(Issue 2), 36–45.

- Kandel M. A., Rizk F. H., Hongou L., Zaki A. M., Khan H., & El-Kenawy E.-S. M. (2023). *Evaluating the Efficacy of Deep Learning Architectures in Predicting Traffic Patterns for Smart City Development.* Full-Length Article, Volume 6(Issue 2), 26–35.

- Rizk F. H., Elshabrawy M., Sameh B., Mohamed K., & Zaki A. M. (2024). *Optimizing Student Performance Prediction Using Binary Waterwheel Plant Algorithm for Feature Selection and Machine Learning.* Full-Length Article, Volume 7(Issue 1), 19–37.