

AHMED G. GAD

ASSISTANT LECTURER, M.SC.

+20 109 892 4491

ahmed.gad@fci.kfs.edu.eg

0000-0002-2671-041X

in ahmed-g-gad



WORK EXPERIENCE

› Software Unit Co-Chair - Kafrelsheikh University

Educational solutions

July 2021 – Present

Kafrelsheikh, Egypt

- Developed an online tuition payment system for Kafrelsheikh University, streamlining student fee collection.
- Provided IT consulting expertise to various university departments as Software Unit Co-Chair.

› Self-Employed Software Developer

Point-of-Sale (POS) Solution

June 2018 – July 2020

Cairo, Egypt

- Developed a POS application for managing customer installments, including calculation, scheduling, one-click full payment option, and comprehensive company status reports (invoices, payments, and outstanding balances).

› Self-Employed Software Developer

Shareholding Management System

May 2015 – July 2017

Cairo, Egypt

- Developed a comprehensive Shareholding Management System for a client organization. This system streamlined management of shareholders, sales representatives, and headquarters. It facilitated the calculation and distribution of monthly regular and irregular profits, ensuring accurate annual profit settlements for all shareholders.

TEACHING EXPERIENCE

› Co-designer/Instructor - Kafrelsheikh University

Data Mining; Foundations of Information System; Mobile Software Design; Network Analysis & Design; Technical Writing; Network Management; Mobile Computing. RapidMiner; Number Systems; HTML5; Python; LaTeX; Java Android; Microsoft Windows Server

September 2019 – Present

Kafrelsheikh, Egypt

› Teaching Assistant; Assistant Lecturer - Kafrelsheikh University

Data Communication and Human Computer Interaction (HCI)

September 2019 – Present

Kafrelsheikh, Egypt

› Co-designer/Instructor - Luxor University

Foundations of Databases; Foundations of Programming; Network Management. SQL Server; C++; Microsoft Windows Server

November 2017 – September 2019

Luxor, Egypt

› Teaching Assistant - Luxor University

Networking; Electronics; Digital Circuits

November 2017 – September 2019

Luxor, Egypt

EDUCATION

› M.Sc. in Information Technology

Minia University

October 2019 – May 2023

Minia, Egypt

Advisors: Prof. Dr. Essam H. Houssein; R. Prof. P. N. Suganthan; Prof. MengChu Zhou

Research Area: **Meta-heuristic Optimization; Cloud Computing; Task Scheduling**

› B.Sc. in Information Technology

Mansoura University

September 2009 – May 2013

Mansoura, Egypt

Grade: Excellent with honour

SKILLS

- **Programming:** Python; C#; Java; JavaScript; SQL
- **Tools:** LaTeX; MySQL; Microsoft Office
- **Languages:** Arabic (native); English (very good)
- **Personality:** Result-oriented; Eye for detail; Responsible; Quick learner; Self-motivated; Hard-working by feeling
- **Hobbies:** Walking; Reading; Watching movies; Meditation

SELECTIVE PROJECTS

› Cloud Task Scheduling Optimization

2 Papers Published

- Developed a novel meta-heuristic algorithm for efficient cloud task scheduling, optimizing workload allocation on processors within data centers. The approach was validated using various synthetic and real-world datasets.

› Meta-heuristic Feature Selection

4 Papers: 3 Published in 2022 & 2023, 2 Under Review in 2023

- Proposed and evaluated efficient meta-heuristic approaches for feature selection, a critical step in machine learning. These algorithms address the NP-hard problem, demonstrably improving performance on low- and high-dimensional benchmark datasets from the UCI repository.

REFEREES

Prof. Dr. Essam H. Houssein

Faculty of Computers and Information, Minia University, Minia 61519, Egypt

essam.halim@mu.edu.eg

Dr. Karam M. Sallam

University of Sharjah, Sharjah 27272, United Arab Emirates

ksallam@sharjah.ac.ae

PUBLICATIONS

Journal Articles

- [12] T. Wang, J. Liyun, J. Xu, and A. G. Gad*, "A hybrid intelligent optimization algorithm to select discriminative genes from large-scale medical data," *International Journal of Machine Learning and Cybernetics* (SCIE: Q2; SJR: Q1; JIF: 5.6), –, Under Review .
- [11] T. Wang, J. Liyun, J. Xu, and A. G. Gad*, "Swarm intelligence with mutual information and balanced exploration and exploitation for feature selection and dimensionality-independent classification," *Applied Soft Computing* (SCIE: Q1; SJR: Q1; JIF: 8.7), –, Under Review .
- [10] A. G. Gad*, E. H. Houssein, M. Zhou, P. N. Suganthan, and Y. M. Wazery, "Damping-assisted evolutionary swarm intelligence for industrial IoT task scheduling in cloud computing," *IEEE Internet of Things Journal* (SCIE: Q1; JIF: 10.6), 2023. DOI: 10.1109/JIOT.2023.3291367.
- [9] L. Jia, T. Wang, A. G. Gad*, and A. Salem, "A weighted-sum chaotic sparrow search algorithm for interdisciplinary feature selection and data classification," *Scientific Reports* (SCIE: Q2; SJR: Q1; JIF: 4.6), 2023. DOI: 10.1038/s41598-023-38252-0.
- [8] A. A. Abd El-Mageed, A. G. Gad*, K. M. Sallam, K. Munasinghe, and A. A. Abohany, "Improved binary adaptive wind driven optimization algorithm-based dimensionality reduction for supervised classification," *Computers & Industrial Engineering* (SCIE: Q1; JIF: 7.9), vol. 167, p. 107 904, 2022. DOI: 10.1016/j.cie.2021.107904.
- [7] H. E. Abdelkader, A. G. Gad*, A. A. Abohany, and S. E. Sorour, "An efficient data mining technique for assessing satisfaction level with online learning for higher education students during the covid-19," *IEEE Access* (SCIE: Q2; SJR: Q1; JIF: 3.9), vol. 10, pp. 6286–6303, 2022. DOI: 10.1109/ACCESS.2022.3143035.
- [6] A. G. Gad*, "Particle swarm optimization algorithm and its applications: A systematic review," *Archives of Computational Methods in Engineering* (SCIE: Q1; JIF: 9.7), vol. 29, no. 5, pp. 2531–2561, 2022, 🏆 Highly Cited Paper; 🔥 Hot Paper (Web of Science). DOI: 10.1007/s11831-021-09694-4.
- [5] A. G. Gad*, D. T. Mosa, L. Abualigah, and A. A. Abohany, "Emerging trends in blockchain technology and applications: A review and outlook," *Journal of King Saud University - Computer and Information Sciences* (SCIE: Q1; JIF: 6.9), vol. 34, no. 9, pp. 6719–6742, 2022, *Among the most downloaded articles from the journal in the last 90 days (Scopus). DOI: 10.1016/j.jksuci.2022.03.007.
- [4] A. G. Gad*, K. M. Sallam, R. K. Chakraborty, M. J. Ryan, and A. A. Abohany, "An improved binary sparrow search algorithm for feature selection in data classification," *Neural Computing and Applications* (SCIE: Q2; SJR: Q1; JIF: 6.0), vol. 34, no. 18, pp. 15 705–15 752, 2022. DOI: 10.1007/s00521-022-07203-7.
- [3] E. H. Houssein, A. G. Gad, K. Hussain, and P. N. Suganthan, "Major advances in particle swarm optimization: Theory, analysis, and application," *Swarm and Evolutionary Computation* (SCIE: Q1; JIF: 10.267), vol. 63, p. 100 868, 2021, 🏆 Highly Cited Paper (Web of Science), *Among the most cited articles published in the past 3 years (Scopus). DOI: 10.1016/j.swevo.2021.100868.
- [2] E. H. Houssein, A. G. Gad, Y. M. Wazery, and P. N. Suganthan, "Task scheduling in cloud computing based on meta-heuristics: Review, taxonomy, open challenges, and future trends," *Swarm and Evolutionary Computation* (SCIE: Q1; JIF: 10.267), vol. 62, p. 100 841, 2021, 🏆 Highly Cited Paper (Web of Science), *Among the most cited articles published in the past 3 years (Scopus), *Among the most popular articles in the journal (Scopus). DOI: 10.1016/j.swevo.2021.100841.

Book Chapters

- [1] E. H. Houssein, A. G. Gad, and Y. M. Wazery, "Jaya algorithm and applications: A comprehensive review," in *Metaheuristics and Optimization in Computer and Electrical Engineering* (Scopus indexed), vol. 696, 2021, pp. 3–24. DOI: 10.1007/978-3-030-56689-0_2.

Notes:

*Corresponding author; SCIE = Science Citation Index Expanded; SJR = Scientific Journal Ranking; JIF = Journal Impact Factor;