

PERSONAL INFORMATION



📍 616 Sayda Khadiga ,New Nozha , First Salam, Cairo Egypt , postal code 11312
☎ 01001263049 , 0226991758 & 01227689798
✉ m.abdallah@ci.suez.edu.eg & makloof@hotmail.com
🌐 ci.suez.edu.eg (s)
Male | Date of birth 06 Apr 1971 | Nationality Egyptian

JOB APPLIED FOR
POSITION

Professor

EDUCATION AND TRAINING

2015/2016	Postdoctoral fellow, Granada University, Spain
2012	PhD - Computer Science - Thesis Title: 'Computational Intelligence for Airline Operations and Flight Preparations', Faculty of Science. Zagazig University
2005	Master- Computer Science - Thesis Title: 'Expert system to simulate flight activities progressions', Faculty of science. Cairo University, Egypt.
1995	Bachelor of Science, Computer Science Faculty of science. Zagazig University, Egypt

WORK EXPERIENCE

Mar2025-Present	▪ Dean of the faculty of Computer Science , Nahda University.
Aug 2024 –Present	▪ Vice Dean of the faculty for Community Service and Environmental Development Affairs. Faculty of Computers and informatics, Suez Canal University, Egypt.
October 2012 –Present	▪ Full Professor Faculty of Computers and informatics, Suez Canal University, Egypt.
Nov 2015 -Apr2016	Postdoc Fellow
May2017 Jun2017	• Postdoctoral fellow, Granada University ,Spain.
Sep 2020 –Sep2022	• Postdoctoral fellow, University of Bologna, Italy.
	▪ Program director for Bioinformatics credit program

- Sep 2022 –Sep2024*
- General Program director for AI –Data Science, Software Engineering and Bioinformatics credit Programs, Faculty of Computers and Informatics, Suez Canal University, Egypt.
 - Contributory to Cybersecurity & Artificial intelligence_ Data science Credit Programs.
- Jan 2013 – Oct2015*
- Quality assurance unit manager faculty of computers and informatics Suez Canal University.
- August 2006– October 2012*
- Information Systems director (Egyptair -Civil Aviation ministry)
- Information Systems director for EgyptAir Airline .
 - Project manager for EgyptAir Airline IOCC .
- September 1998 – October 2006*
- Egyptair operations Staff & System Administrator
- EgyptAir Operations Control Officer & Programmer & SITA FleetWatch System Administrator.
- August 1995 – September 1997*
- Programmer & Systems analyst
- Programmer at consultation Office of Integrated System (COINS)
 - System Administrator and Technical Support for Network and Portfolio Management System for Arab International Co. for Financial Investments (AICO) (Part Time).

Mother tongue(s) Arabic

Other language(s) ENGLISH SPOKEN /WRITTEN

COMMUNICATION SKILLS : Worked in various types of teams, from research teams to national tenders

ORGANIZATIONAL / MANAGERIAL SKILLS

- Reviewer for the journals (IEEE access journal & international journal of production research and Transport dynamics journal) & BMC medical informatics.
- Airline IS Manager & Project Manager.

TRAINING & SKILLS

- Certified trainer in digital transformation at the Supreme Council of Universities
- Quality assurance unit manager faculty of computer and informatics Suez Canal University.
- Project manager.

- National Authority for Quality Assurance and Accreditation of Education courses.
- How to prepare policies and objectives and performance measurement and evaluation.
- Key Skills for managers.
- Decision support systems Business Intelligence (SITA).
- Special assistance team management/member training (KENYON).
- Contemporary manager between time and compass.
- Managing and maintaining Microsoft Windows Server
- Planning and maintaining Microsoft Server.
- MCSA/MCSE.net jump start.

COMPUTER SKILLS

- Machine learning, Data mining, Data Science, Big Data, knowledge base and rule-based systems, expert systems, decision support systems and Business Intelligence, Bioinformatics, intelligent bioinformatics, Biomedical Decision Support, and project management.
- Apache Hadoop, Apache Spark, Apache Kafka, Apache Flink, Google Colab Jupyter Notebook.
- Windows, Servers ,Unix , Linux-based server, Networks,VB.net ,C & C++ &, Prolog , Oracle -SQL Server, Python, Jupyter notebooks, TensorFlow, R, Matlab,Weka ,Arena.

Research projects

- *HaploRisk: Building haplotype-based models to predict individual risk, onset, evolution and therapeutic response to Multiple Sclerosis* Granada University, Spain.
- *Interaction sites Prediction in protein structures*, Biocomputing Group, Department of Biological, Geological and Environmental Sciences (BiGeA), University of Bologna, Italy,
- *Airline operations monitor for EgyptAir Airlines*, Egypt.

TEACHING COURSES

- Software engineering1, Software engineering2, Essentials of Management Information Systems, E-commerce, E-government, Introduction to Information Systems , Artificial intelligence, Expert systems, Logic Programming (Prolog) , Data mining, Big Data, Artificial neural networks, Operating systems, Decision Support Systems and Business Intelligence, HTML, JavaScript, Operations Research, Programming languages C++ , Python, Data structure.
- Machine Learning and Big Data Analytics, Machine Learning and Big Data Concepts, Algorithms, Bioinformatics, Bioinformatics algorithms, Introduction to Web Technology, Image processing, pattern recognition, Medical information systems, System analysis, Intelligence bioinformatics, Databases, Airline Operations and Scheduling, Disruption management framework, models and applications, Strategic information systems and Machine learning in healthcare.

PUBLICATIONS

1. M. Abd Allah ,M. Waheed and U.Badawi " Real-Time Aircraft Turnaround Operations manager", Production Planning & Control : 25.1 (2014): 2-25.
2. M. Abd Allah and M. Waheed "Real-Time Management System for Airline Operations ", International review on computers and software Vol. 6 N.2, Mar 2011
3. M. Waheed and M. Abd Allah " Multi Objective Genetic Algorithms for Flights Amalgamation Problem ",international journal of computer applications in technology vol. 44 n.4, 2012.
4. M.E.wahed ,M.Abdallah and M.S.Elkomy "Non superfluous Time Solutions of the Laplacian Framework", International journal of computer Science and Network security,Vol.14No5,May2014
5. M.E.wahed ,M.Abdallah and M.S.Elkomy "Simulation of The Detection of Noxious Breast Cancer ", International journal of computer Science and Network Security,Vol.14,No9,Septamember2014
6. Sara Ibrahim Ibrahim, Mohamed Abd Allah Makhoulf, Gh.S. El-Tawel and M.E. Wahed "Swarm Optimization Techniques for Segmenting Gel Electrophoresis Images" , American Journal of Bioinformatics, 5 (1), 18-33 2016 .
7. Mohamed Abd Allah Makhoulf "Deep Learning for Prediction of Protein-Protein Interaction "Egyptian Computer Science Journal Volume 42 May 2018.
8. Mohamed Abd Allah , Mohamed Tabash and Bela Tawfeek "Intrusion Detection Model Using Naive Bayes and Deep Learning Technique" Volume 17 ,No. 2 March 2019.
9. Ahmed elsayed ,Mohamed Abdallah , Ghada eltaweel "Improved Salp Swarm Algorithm for Feature Selection" Journal of King Saud University - Computer and Information Sciences , Jun, 2018
10. Ahmed elsayed ,Mohamed Abdallah , Ghada eltaweel " Dimensionality Reduction using an Improved Whale Optimization Algorithm for Data Classification" International Journal of Modern Education and Computer Science. Jun ,2018.
11. Ah. E. Hegazy, Omar A. M. Salem, M. A. Makhoulf and Gh. S. El-Tawe Hybrid Fuzzy Mutual Information with Binary Salp Swarm Algorithm for Feature Selection , Proceedings of The 1st International Conference on Advanced Computer Communication and Informatics (ACCI2018) May, 12-13, 2018, Ismailia, Egypt.
12. Sanaa Fekry Abed Elsadek, Mohamed Abd Allah Makhoulf, Mohamed Amal (2018) Supervised Classification of Cancers Based on Copy Number Variation In: Hassanien A., Shaalan K., Gaber T., Tolba M. (eds) Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2018. AISI 2018. Advances in Intelligent Systems and Computing, vol 639. Springer, Cham
13. Hegazy, Ah E., M. A. Makhoulf, and Gh S. El-Tawel. "Feature Selection Using Chaotic Salp Swarm Algorithm for Data Classification." *Arabian Journal for Science and Engineering*(2018): 1-16.
14. S.Fekry ,M.Makhoulf ,B.Tawfiq ,H. El-mahdy "Hybrid Feature Selection using Swarm and Genetic Optimization for DNA Copy Number Variation', International Journal of Engineering Research and Technology Volume 12, Number 7 (2019), pp. 1110-1116
15. Islam S. Fathi, Mohamed Ali Ahmed , M. A. Makhoulf and E. A. Osman "Compression Techniques of Biomedical Signals in Remote Healthcare Monitoring Systems: A Comparative Study" ,International Journal of Hybrid Innovation Technologies , Volume 1, No. 1, 2021
16. El-Gawady A, Makhoulf MA, Tawfik BS, Nassar H. Machine Learning Framework for the Prediction of Alzheimer's Disease Using Gene Expression Data Based on Efficient Gene Selection. *Symmetry*. 2022; 14(3):491. <https://doi.org/10.3390/sym14030491>

17. Amal Elnawasany , Mohamed Abd Allah Makhoulf , BenBella Tawfik , Hamed Nassar," Feature Selection of Unbalanced breast Cancer data using Particle Swarm Optimization" International Journal of Electrical and Computer Engineering, vol. 12, no. 5: October 2022 (2088-8708) 12 (5)
18. I. S. Fathi, M. A. A. Makhoulf, E. Osman and M. A. Ahmed, "An Energy-Efficient Compression Algorithm of ECG Signals in Remote Healthcare Monitoring Systems," in IEEE Access, vol. 10, pp. 39129-39144, 2022, doi: 10.1109/ACCESS.2022.3166476.
19. Abdelwahed, N.M., El-Tawel, G.S. & Makhoulf, M.A. Effective hybrid feature selection using different bootstrap enhances cancers classification performance. *BioData Mining* 15, 24 (2022).
<https://doi.org/10.1186/s13040-022-00304-y>
20. Fathi, I.S., Ahmed, M.A. & Makhoulf, M.A. An efficient compression technique for Foetal phonocardiogram signals in remote healthcare monitoring systems. *Multimedia Tools Appl* (2022).
<https://doi.org/10.1007/s11042-022-14259-z>
21. Fathi, I.S., Ahmed, M.A. & Makhoulf, M.A. An efficient computation of discrete orthogonal moments for bio-signals reconstruction. *EURASIP J. Adv. Signal Process.* 2022, 104 (2022).
<https://doi.org/10.1186/s13634-022-00938-4>
22. Ibrahim, S., Makhoulf, M.A. & El-Tawel, G. Multimodal medical image fusion algorithm based on pulse coupled neural networks and nonsubsamped contourlet transform. *Med Biol Eng Comput* (2022).
<https://doi.org/10.1007/s11517-022-02697-8>
23. Haidi Said, BenBella S. Tawfik and Mohamed A. Makhoulf, "A Deep Learning Approach for Sentiment Classification of COVID-19 Vaccination Tweets" International Journal of Advanced Computer Science and Applications(IJACSA), 14(4), 2023.
24. Sa. I Ibrahim, Gh. S El-Tawel, and Mohamed A. Makhoulf, "Brain Image Fusion using the Parameter Adaptive-Pulse Coupled Neural Network (PA-PCNN) and Non-Subsampled Contourlet Transform (NSCT)", *Multimedia Tools and Applications*, Accepted August 2023. Indexed in Scopus, Web of Science- IF=3.6.
25. Elnawasany, A., Tawfik, B. and Makhoulf, M. 2024. Breast cancer survival analysis and machine learning to predict the impact of different treatments. *Statistics, Optimization & Information Computing*. (May 2024). DOI:<https://doi.org/10.19139/soic-2310-5070-2027>.
26. Osama Farouk, Mahmoud Bakrey and Mohamed Abdallah, "DBPF: An Efficient Dynamic Block Propagation Framework for Blockchain Networks" International Journal of Advanced Computer Science and Applications(IJACSA), 15(10), 2024. <http://dx.doi.org/10.14569/IJACSA.2024.01510117>
27. Hegazy, A.E., Hafiz, B., Makhoulf, M.A. *et al.* Optimizing medical data classification: integrating hybrid fuzzy joint mutual information with binary Cheetah optimizer algorithm. *Cluster Comput* **28**, 250 (2025). <https://doi.org/10.1007/s10586-025-05102-9>
28. Moustafa, T., Refaat, H., & Makhoulf, M. (2025). Hybrid Deep Learning Model: LSTM and 2BiGRU for Predicting Coronavirus (COVID-19). *Statistics, Optimization & Information Computing*, 13(4), 1714-1731. <https://doi.org/10.19139/soic-2310-5070-2271>

1. FAPS (Flight Activities Progressions System for Egypt air) to Automate and optimize the flight preparation during aircraft turnaround and regularity management for Airlines.
2. Aircraft crew members briefing watch with finger print Time Attendance & Access Control
3. BAMS (Broadcast actions and management system) to simulate Operational departments work flow and documentation System (Egypt air).
4. Aircraft performance and punctuality management system.(Egypt Air)
5. Aircrafts minimum equipment lists (MEL) Maintenance database for Egypt air (Flight dispatch , Maintenance, Operation control).
6. Fax in/Out Database System for Egypt Air.
7. Report module For Egypt Air (Client Server Reports).
8. Decision Support System with Geographic Database for Air Force.
9. Speaking System to help blinds to work on computers.
10. Management and incentive System for Research Institute Ground Water .
11. Portfolio Management System for Arab international Co. for Financial Investments (Aico)
12. System to Response about Holy Quran Questions.

CONFERENCES & workshops

- First Environmental Scientific Conference: The Role of Artificial Intelligence in Environmental Preservation and Sustainable Development 29 Apr2025
- Second Employment Forum: Digitization and Opportunity Makers 8 Apr 2025
- The 1st International Conference on Advanced Computer Communication and Informatics (ACCI2018) May, 12-13, 2018, Ismailia, Egypt.
- The first annual international conference on science, technology and entrepreneurship Nahada university 19 Dec 2018 Ben Swaif , Egypt.
- Computational and system biology workshop of the SIB group Jun 28, 2017 ,Bologna, Italy
- IWBBIO 2016 international conference on bioinformatics and biomedical engineering Granada Spain
- SITA Aircraft services (7th AIRCOM FleetWatch user group meeting London 10-11 MAY 2000)
- SITA Aircraft services (8th AIRCOM FleetWatch user group meeting USA OHI Cincinnati 01)
- SITA Flight Operation (9th AIRCOM FleetWatch user group meeting London 24-25 April 2002)
- SITA Flight Operation (10th AIRCOM FleetWatch user group meeting London 10-11th SEP 2003)
- SITA Flight Operation (11th AIRCOM FleetWatch user group meeting Paris 29-30th SEP 2004).

PRIZES AND AWARDS & HONORS

- President & Aviation Minister Certifications, Al-Ahram newspaper and Algomhouria newspaper.

THESIS SUPERVISION

1. *DNA sequence for human diseases identifications* , Master
2. *Breast Cancer Analysis and Survivability Prediction Model* , PhD
3. *Feature Selection using Bio-Inspired Optimization Algorithms*, Master
4. *On Some Solution by Using Optimization model for Laplacian Mesh* , Master
5. *Intrusion Detection Model Using Machine Learning*, Master
6. *Emotions analysis from Arabic and dialectal texts Using machine learning*, Master

7. *Build of Robust and Reliable Model for Cancer Outcome prediction and disease-associated DNA Copy Number Variations (CNVs) identification.* , PhD
8. *Machine Learning for Disease Prediction over Healthcare Data* ,PhD
9. *Gene Expression Data Analysis Using Machine Learning* ,PhD
10. *Prediction Models for Viral Sequence Identification Using Machine Learning: Chronic Hepatitis C Virus*, PhD
11. *Medical Image Fusion Using Machine Learning techniques* ,PhD
12. *Effective Evaluation Measures for Unsupervised Machine Learning* ,PhD
13. *Big Data Analytics and Machine Learning Frameworks for Industrial Internet of Things*, PhD
14. *Big data analytics and Machine Learning for Healthcare Internet-of-Things*, PhD
15. *Machine learning models for prediction of coronavirus (COVID-19)* ,Master
16. *Predictive Analytics for Sentiment analysis of COVID-19 vaccine*) ,Master
17. *Multimodal medical image fusion algorithms*, PhD
18. *Deep learning-based method to predict human genes essentially* ,Master
19. *A Streaming Data Recommender Framework Based on Social Internet of Things*, PhD
20. *Big Data analytics for customer behavior in E-commerce*, PhD
21. *Efficient Techniques for Enhancing the Performance of Artificial Intelligence Models* , PHD
22. *AI Techniques for Prediction in Medical Signal Processing* , Master

Google Scholar

https://scholar.google.com.hk/citations?hl=us&user=PWwrR_QAAAAJ&view_op=list_works&sortby=pubdate

ORCID

<https://orcid.org/my-orcid?orcid=0000-0002-8854-4912>

5/10/25, 3:39 PM

Prof.Dr.Mohamed Abd Allah Makhoulf - Google Scholar



Prof.Dr.Mohamed Abd Allah Makhoulf

Full Professor ,Faculty of Computers and Informatics,
Suez Canal University

Artificial Intelligence
Data mining
Machine learning
Bioinformatics
Optimization and DSS

	entire	After 2020
Bibliographic information	778	700
h-index	12	12
i10-index	16	14