

Personal Details

Name : Dr. Mohammed Zidan
Nationality : Egypt
Department : Artificial Intelligence
E-mail : comsi2014@gmail.com
Degree : Ph.D.



<https://scholar.google.com/eg/citations?user=tSh9E9oAAAAJ&hl=en>

Academic Qualifications

- **Ph.D. Degree of Artificial Intelligence (2019).**
“Proposing and Developing some Algorithms in Quantum Computing”
- **Master Degree of Artificial Intelligence (2015).**
“Improving the Performance of Quantum Neural Network”
- **B. Sc. of Computer Science**
Faculty of Science, Assuit University, Egypt.

Ph.D Thesis

Title: Proposing and Developing some Algorithms in Quantum Computing.

Master Thesis

Title: Improving the Performance of Quantum Neural Network Algorithms

Honors and Awards

- **The award of the robot programmer in Riyadh Competition 2013.**
- **The award of the best robot programmer in Riyadh Competition 2014.**

Professional Skills

- **International Conference Organizing.**
- **Critical thinking.**
- **Research Development and Innovation.**
- **Intelligent communication.**

LANGUAGES

English : Excellent (Write and Read).

Work Experience

- Assistant Professor at Artificial Intelligence Department, Hurghada Faculty of Computers and Artificial Intelligence, Egypt.**
- Assistant Professor at Faculty of Engineering, King Salman International University, Egypt.**
- Post Doc, Photonic and Smart Material Center, Zewail City of Science and Technology, Egypt (2019-2020).**
- Teaching Assistant at University of Science and Technology, Zewail City of Science and Technology, Egypt (2014-2019).**
- Researcher Assistant at University of Science and Technology, Zewail City of Science and Technology, Egypt (2014-2019).**

List of Publications:-

- 1- **M. Zidan**, H. Eleuch, M. Abdel-Aty, Non-Classical Computing Problems: Toward Novel Type of Quantum Computing Problems, Results in Physics, 103536, 2020 (**IF= 4.476**)
- 2- W Liu, Q Wu, J Shen, J Zhao, **M. Zidan**, L Tong, An optimized quantum minimum searching algorithm with sure-success probability and its experiment simulation with Cirq. J Ambient Intell Human Comput (2021). <https://doi.org/10.1007/s12652-020-02840-z>, 2021 (**IF= 7.104**)
- 3- **M. Zidan**, A. Abdel-Aty, D. M. Nguyen, A. S.A. Mohamed, Y. Al-Sbou, H. Eleuch and M. Abdel-Aty, A quantum algorithm based on entanglement measure for classifying Boolean multivariate function into novel hidden classes, Results in Physics, 15, 2019 (**IF= 4.476**)
- 4- **M. Zidan**, A. Abdel-Aty, M. El-shafei, M. Feraig, Y. Al-Sbou, H. Eleuch and M. Abdel-Aty, Quantum Classification Algorithm Based on Competitive Learning Neural Network and Entanglement Measure, applied sciences, 9(7), 1277, 2019 (**IF= 2.679**)
- 5- A. Sagheer, **M. Zidan**, M. M. Abdelsamea, A Novel Autonomous Perceptron Model for Pattern Classification Applications, *Entropy*, 21, 763, 2019 (**IF= 2.524**)
- 6- A. Abdel-Aty, H. Kadry, **M. Zidan**, Y. Al-Sbou and M. Abdel-Aty, A quantum classification algorithm for classification incomplete patterns based on entanglement measure, Journal of Intelligent & Fuzzy Systems, 38(3), 2020 (**IF= 1.851**)
- 7- **M. Zidan**, A novel quantum computing model based on entanglement degree, Modern Physics Letters B, 34 (35), 2020 (**IF= 1.668**)
- 8- **M. Zidan**, A. Abdel-Aty, A. El-Sadek, E. A. Zanaty, M. Abdel-Aty, AIP Conference Proceedings 1905(1), 020005 (2017). (**IF= 0.4**)
- 9- **M. Zidan**, A. Sagheer, N. Metwally, An Autonomous Competitive Learning Algorithm using Quantum Hamming Neural Networks, IEEE, 12-17 July, 2015 at Killarney, Ireland (**acceptance rate : 18% in 2014 Oral**).
- 10- **M. Zidan**, A. Abdel-Aty, A. Younes, E. A. Zanaty, Mahmoud Abdel-Aty, A Novel Algorithm based on Entanglement Measurement, Appl. Math. Inf. Sci. 12, No. 1, 265- 269 (2018). (**Scopus Cite Score= 1.6**)
- 11- A. S. Sakr, M. Y. Shams, Amena Mahmoud, **M. Zidan**, Amino Acid Encryption Method Using Genetic Algorithm for Key Generation, Computers-Material and Continua Journal, Vol 70, No.1, pp.123-134(2022) (**IF= 3.5**)
- 12- **M. Zidan**, M. Gamal, Mahmoud Abdel-Aty, A Quantum Algorithm for Evaluating Hamming Distance, Computers-Material and Continua Journal, (**IF= 3.5**)

Running Projects

- New Quantum Algorithms Using Multi-Qubit Interaction (Academy of Scientific Research and Technology).
- Quantum Graphene.

Books

- Handbook of IoT based Smart Waste Management for Sustainable Environment, **CRC Press**, Taylor and Francis group (**Indexed in Scopus under press**).

Conferences and workshops-

- **Invited Speaker for Morocco Quantum Day on May 29, 2021.**
- **Invited Speaker for AI workshop in the 9th International Conference on Mathematics and Information Science 2020.**
- **Invited Keynote Speaker for One Day Conference on Quantum Computing and Quantum Information, Alexandria University, 2019.**
- **Invited Keynote Speaker for Alexandria Quantum Computing Summer School, 14-20 July 2019.**
Computer Science Department, Faculty of Science, El-Shatby, Alexandria University.
- **Invited Keynote Speaker for AI workshop 8th International Conference on Mathematics and Information Science 2019.**
- **Invited Keynote Speaker for Quantum Computing Promises workshop. (2018)**
Faculty of Computers and Artificial Intelligence, Cairo University.
- **Quantum Computing Promises and Challenges. (2019)**
Computer Science Department, Faculty of Science, Assuit University, Assuit University.
- **Invited Speaker in the front of Professor Osama Elkahtib (Stanford University) about Quantum Artificial Intelligence (2016)**
Zewail university of Science and Technology.
- **Capabilities of Quantum Computer (2017).**
Zewail university of Science and Technology.
- **Autonomous Quantum Neural Networks.**
Computer Science Department, Ain-Shams University (2017).
- **Autonomous Neural Networks learning algorithm Inspired from Quantum Computing.**
Computer Science Department, Faculty of Science, Assuit University (2016).
- **Improving the Performance of Quantum Neural Network Algorithms.**
Computer Science Department, Faculty of Science, Aswan university (2015).