

CURRICULUM VITAE



1. PERSONAL DATA

Name: Prof. Ahmed Abuelyazid Elsayy

Date of Birth: 30 July, 1979

Place of Birth: Egypt

Nationality: Egyptian.

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2. ACADEMIC/PROFESSIONAL PARTICULARS

(a) Field of Specialization:

Major Field of Specialization: Computer Science,
Fine Field Specialization: artificial intelligence.

(b) Academic Qualifications

Ph. D in Computer Science, Faculty of Science, Suez Canal University, Ismailia, Egypt, 2011. (Title: Using Particle Swarm Optimization Technique for Solving Machine Time Scheduling Problem).

M.Sc. in Operation Research and Decision Support, Faculty of Computers and Information, Cairo University, Cairo, Egypt, June 2003. (Title: A Model to Solve Multi-Cycles Machine Time Scheduling Problems)

B.Sc. in Operation Research and Decision Support, Faculty of Computers and Information, Cairo University, Cairo, Egypt, May 2000.

(c) Language Proficiency

English : Good command of both written and spoken English.

Arabic : Mother tongue.

3. CAREER DETAILS

(a) Academic Positions Held

- **11/2022** Professor in Computer Science Dept. Faculty of Computers and Artificial intelligence, Benha University, Egypt.
- **9/2017** Associate Professor in Computer Science Dept. Faculty of Computers and and Artificial intelligence, Benha University, Egypt.
- **7/2012 – 8/2017** Assistant Professor in Computer Science Dept. Faculty of Computers and and Artificial intelligence, Benha University, Egypt.
- **9/2004 – 6/2012** Assistant Lecturers in Computer Science Dept. Faculty of Computers and Information Technology, Taif University, Kingdom of Saudi Arabia.

- **1/2023 until now** Professor in computer science, Department of Communications and Computers (part time) at the Higher Institute of Engineering and Technology in Tanta.
- **9/2017 – 12/2022**, Associate Professor, Department of Communications and Computers (part time) at the Higher Institute of Engineering and Technology in Tanta.
- **2015-2017** Assistant professor in the Department of Communications and Computers (part time) at the Higher Institute of Engineering and Technology in Tanta.
- **2021 until now**, Trainer of digital transformation at the Information Technology Training Unit, Benha University.
- **2020 until now**, Trainer at the Faculty Capabilities Development Center, Benha University.

(b) Professional/Industrial Positions Held

- **2000 - 2004** Assistant manager in Planning Department, Planning and Monitoring Group, Social Fund for Development (SFD), Egypt Government, United Nation Development Program (UNDP), Cairo, Egypt.
- **2001** system analyst and programmer in Co. Design Egypt for Consulting Service Ltd, Cairo, Egypt. (Branch of Co. Design International Consulting Service Inc, Canada).

(c) Administrative Positions Held

- **1/2023** until now: vice dean of students affairs at faculty of technological industry and energy, Delta Technological University, Egypt.
- **11/2022** until now: head of information technology department at faculty of technological industry and energy, Delta Technological University, Egypt.
- **10/2020 – 10/2022** Vice Dean for Community Service and Environmental Development, Faculty of Computers and Artificial Intelligence, Benha University, Egypt.
- **8/2021- 2/2022** supervise on Artificial intelligence Dept., Faculty of Computers and Artificial Intelligence, Benha University, Egypt.
- **11/2017- 10/2020**: head of computer science Dept., Faculty of Computers and Artificial Intelligence, Benha University, Egypt.
- **10/2020- 9/2022** Chairman of the Community Service and Environmental Development Committee, Faculty of Computers and Artificial Intelligence, Benha University.
- **10/2020 - 9/2022** Member of the Community Service and Environmental Development Council, Benha University.
- **10/2020 - 9/2022**, Vice Chairman of the Consulting Board of the Faculty of Computers and Artificial Intelligence, Benha University.
- **8/2018 - 9/2022**, Member of New Programs Directors Board, Faculty of Computers and Artificial Intelligence, Benha University
- **9/2020 – 6/2021** Chairman of the Committee to Apply for the Egypt Award for Governmental Excellence, Faculty of Computers and Artificial Intelligence, Benha University, Egypt.
- **9/2016 - 9/2022**, Member of faculty council at Faculty of Computers and Artificial Intelligence, Benha University, Egypt.
- **9/2016 - 9/2022**, Member of department council at Faculty of Computers and Artificial Intelligence, Benha University, Egypt.

4. Teaching

(a) Summary of Courses Taught

- **Postgraduate:**
 - Teaching advanced artificial intelligence course, 16 times.
 - Teaching multi-agent systems course, 2 times.
 - Teaching advanced computational intelligence course, 1 time.
- **Undergraduate: (teaching the following sources)**
 - Artificial intelligence, 7 times.
 - Neural networks, 7 times.
 - Operating system, 15 times.
 - Logic programming, 6 times.
 - Introduction to programming, 10 times.
 - Structure programming, 10 times.
 - Data structure, 10 times.
 - Modeling and simulation, 8 times
 - Decision support systems, 2 times.
 - Web programming, 6 times.
 - Humanities (Organizational behavior), 6 times.
 - Statistics, 3 times.
 - Graduate projects, 9 times.

(b) Participation in Academic Accreditation

- **2022** member of board of Academic measurement and evaluation in Delta University.
- **2016- 2017** Quality Coordinator in computer science Dept.
- **2017** Faculty coordinator in site visit review for accreditation.
- **2016 – 2018** Coordinator of scientific research standard in accreditation standards.
- **2016 – 2018** Coordinator of post graduate standard in accreditation standards.

(c) Research Students Supervised/Trained

Level	Number of Trainees
PhD Students	7
Master Students	14

(d) Participation in Thesis and Oral Examination Committees

Level	Number of Examinations
PhD Students	4 Thesis
Master Students	6 Thesis
Undergraduate Students	30 Oral examinations

(e) Training

- Strategic Planning, from The National Authority for Education Quality Assurance and Accreditation, 2020.

- TOT for digital transformation, Supreme Council of University, 14-18 September 2019.
- External review for Accreditation, Quality and Accreditation Center in Benha University, 7-8 February 2015.
- Self-evaluation for Accreditation, Quality and Accreditation Center in Benha University, 4-5 February 2015.
- Program and course specification for Accreditation, Quality and Accreditation Center in Benha University, 11-12 February 2015.
- Primavera project planning for enterprise (P3E), 2002.

5. RESEARCH

(a) Research Interests

Artificial intelligence (Swarm Intelligence, Deep Learning, NLP)

Optimization

Wireless networks

Operations Research

(b) Publications/Citations Data

Type of Publication	Number of Publications
Articles in International Refereed Journals	47
Conference Papers	39
Books/Book Chapters	7
	1

Citation Source

Google scholar

https://scholar.google.com/citations?hl=en&user=3fIR9QIAAAAJ&view_op=list_works&sortby=pubdate

(c) Research Grants

Research grant from Qassim University, represented by the Deanship of Scientific Research, Dr. Walid Osamy, [IDCT: Intelligent Data Collection Technique for IoT-Enabled Heterogeneous Wireless Sensor Networks in Smart Environments](#), October 2020 – October 2021, 60 thousand SAR.

(d) Participation in Regional & International Conferences

- 2021 International Mobile, Intelligent, and Ubiquitous Computing Conference (MIUCC), Cairo – Egypt, 26/5/2021.
- 2022 International Telecommunications Conference (ITC-Egypt), Demiatta – Egypt, 26/7/2022.

6. SERVICE

(a) Membership of Conference Committees

- Security & Networking committee, oral examiner, 2nd International Conference of Computing and Informatics Conference, faculty of computers and informatics – Benha University – Egypt, 16-17 April 2019.
- Students' projects committee, Referee, The first conference for postgraduate studies in the field of applied sciences, Benha University – Egypt, 8/5/2022.

(c) Service as Reviewer

Journals

- Journal of Computational Science, ISSN 1877-7503, Elsevier, April 2022.
- IEEE Access, ISSN 2169-3536, IEEE, November 2019.
- IEEE IOT, ISSN: 2327-4662, IEEE, August 2020.
- IEEE Sensors, ISSN: 1558-1748, IEEE, June 2020.
- MEJ. Mansoura Engineering Journal, ISSN: 2735-4202, Faculty of Engineering, Mansoura University, Mansoura, Egypt, March 2021.
- International Journal of Advancements in Computing Technology, ISSN: 2005-8039, Advanced Institute of Convergence Information Technology Research Center, January 2017.
- Jordanian Journal of Computers and Information Technology, ISSN: 2415-1076, Princess Sumaya University for Technology (PSUT) and the Scientific Research Support Fund of Jordan SRSF , June 2017

Conferences

- 2019 International Conference on Innovative Trends in Computer Engineering (ITCE), Egypt, 2019.
- International Conference on Communication, Management and Information Technology ICCMIT'19, Vienna, Austria, 26/3/2019.

(d) University Service

- 11/2020- 10/2022, Member of the Community Service and Environmental Development Council, Benha University - Egypt.
- 2022 College coordinator at Benha University - Egypt and between the Children's University.
- 2021-2022 Coordinator of the faculty at Benha University - Egypt in the presidential initiative called "a decent life".
- 2021 Coordinator of the faculty at Benha University - Egypt in the presidential initiative called "Industrial Egypt".
- 2021 Coordinator of the faculty at Benha University - Egypt in the presidential initiative called "Mawaddah Project".
- 2018 Member in key performance indicators (KPI) committee for Benha university strategic plan - Egypt.

7. List of Publications

(a) International Refereed Journals

- “SEACDSC: secure and energy aware clustering based on discrete sand cat swarm optimization for IoT-enabled WSN application” accepted 2024.
- Ahmed M Khedr, Dilna Vijayan, Ahmed Salim, Ahmed A Elsway, Walid Osamy, “ESSAIOV: Enhanced Sparrow Search Algorithm-Based Clustering for Internet of Vehicles” Arabian Journal for Science and Engineering, April 2023.
- Ahmed A Elsway, Ahmed M Khedr, Oruba Alfawaz, Walid Osamy, “Energy-aware disjoint dominating sets-based whale optimization algorithm for data collection in WSNs” The Journal of Supercomputing, Vol. 79, Issue 4 March 2023.
- Walid Osamy; Ahmed M Khedr; Ahmed Salim; Ahmed Elsway; Mohammed Alreshoodi; Ibrahim Alsukayti, “Recent advances and future prospects of using AI solutions for Security, Fault Tolerance, and QoS Challenges in WSNs”, Electronics, 07 December 2022.
- Ahmed A. Elsway, Ahmed M. Khedr, Oruba Alfawaz, Walid Osamy “Energy-aware disjoint dominating sets-based whale optimization algorithm for data collection in WSNs”, The Journal of Supercomputing, 9/2022.
- W. Osamy, A. M. Khedr, A. Salim, A. I. A. Ali and A. A. El-Sawy “A review on recent studies utilizing artificial intelligence methods for solving routing challenges in wireless sensors networks”, Peerj Computer Science 2022, Accepted.
- W. Osamy, A. M. Khedr, A. Salim, A. I. A. Ali and A. A. El-Sawy, "Coverage, Deployment and Localization Challenges in Wireless Sensor Networks based on Artificial Intelligence Techniques: A Review," in IEEE Access, doi: 10.1109/ACCESS.2022.3156729, 2022.
- Osamy W, Khedr AM, Salim A, AlAli AI, El-Sawy AA. "Recent Studies Utilizing Artificial Intelligence Techniques for Solving Data Collection, Aggregation and Dissemination Challenges in Wireless Sensor Networks: A Review". Electronics. 2022; 11(3):313.
- Diaan Salama, Ibrahim Abdellattif, Nabil Neggaz, Ahmed Elsway "Swarming Behavior of Harris Hawks Optimizer for Arabic Opinion Mining" CMC –Computers, Materials & Continua, vol. 69 (3)d, 2021.
- Diaan Salama AbdElminaam, Nabil Neggaz, Ibrahim Abd Elatif Gomaa, Fatma Helmy Ismail, Ahmed Elsway "ArabicDialects: An Efficient Framework for Arabic Dialects Opinion Mining on Twitter using Optimized Deep Neural Networks" IEEE Access, vol. 9, Pages 97079 – 97099, 2021.
- Mostafa Gamal, Ahmed El-Sawy, Ahmed H. AbuEl-Atta "Hybrid Algorithm Based on Chicken Swarm Optimization and Genetic Algorithm for Text Summarization", International Journal of Intelligent Engineering and Systems (2021), vol. 14 (3), 319-331.
- Hanaa Khater, Ahmed ElSawy, Assem Tharwat, Ihab El-Khodary "Solving Max-Min Separable Problem Using Hybrid Particle Swarm Optimization" International Journal of Intelligent Engineering and Systems (2021), vol. 14 (3), 303-318.
- Walid Osamy, Ahmed M. Khedr, Ahmed A. El-Sawy, Ahmed Salim and Dilna Vijayan "IPDCA: Intelligent Proficient Data Collection Approach for IoT-Enabled Wireless Sensor Networks in Smart Environments" Electronics (2021) vol. 10 (9), 997.

- Hanaa Khater, Ahmed ElSawy, Assem Tharwat, Ihab El-Khodary "Solving Optimization Problem under Stochastic Max-Min Separable Linear Constraints" International Journal of Computer Science and Mobile Computing (2021), vol. 10 (4), 80-89
- Hamada Nayel, Ahmed Hassan, Mahmoud Sobhi, Ahmed El-Sawy "Machine Learning-Based Approach for Arabic Dialect Identification" Proceedings of the Sixth Arabic Natural Language Processing Workshop, 2021, 287-290.
- Ahmed Aziz, Walid Osamy, Ahmed M. Khedr, Ahmed A. El-Sawy, Karan Singh "Grey Wolf based compressive sensing scheme for data gathering in IoT based heterogeneous WSNs" Wireless Networks (2020) vol. 26, pp. 3395-3418.
- Walid Osamy, Ahmed A. El-Sawy, Ahmed M. Khedr "Effective TDMA scheduling for tree-based data collection using genetic algorithm in wireless sensor networks" Peer-to-Peer Networking and Applications (2020) vol. 13, pp. 796-815.
- Mohamed Loey, Ahmed ElSawy, Mohamed Afify "Deep Learning in Plant Diseases Detection for Agricultural Crops: A Survey" International Journal of Service Science, Management, Engineering, and Technology (IJSSMET) vol. 11, Issue 2, pp.41-58
- Walid Osamy, Ahmed A. El-Sawy, Ahmed Salim "CSOCA: Chicken Swarm Optimization Based Clustering Algorithm for Wireless Sensor Networks" IEEE Access 2020, vol. 8, pp. 60676-60688.
- Nora Niazy, Ahmed El-Sawy, Mahmoud Gadallah "Solving Capacitated Vehicle Routing Problem Using Chicken Swarm Optimization with Genetic Algorithm" International Journal of Intelligent Engineering and Systems, 2020, Vol.13, No.5, pp. 502-513.
- Nora Niazy, Ahmed El-Sawy, Mahmoud Gadallah "A Hybrid Chicken Swarm Optimization with Tabu Search Algorithm for Solving Capacitated Vehicle Routing Problem" International Journal of Intelligent Engineering and Systems, 2020, Vol. 13, No. 4, pp. 502-513.
- Ahmed Aziz, Karan Singh, Ahmed ElSawy, Walid Osamy, Ahmed M. Khedr "GWRA: grey wolf based reconstruction algorithm for compressive sensing signals". PeerJ Comput. Sci. 2019, vol. 5, pp. 217.
- Sammer Kama, Ahmed El-Sawy, Mahmoud Mousa, Ahmed Hassan "CoreAlign: Core-based Global Alignment for ProteinProtein Interaction Networks" International Journal of Computer Applications 2019, vol. 178, issue 53.
- Walid Osamy, Ahmed A El-sawy, Ahmed M Khedr "SATC: A Simulated Annealing Based Tree Construction and Scheduling Algorithm for Minimizing Aggregation Time in Wireless Sensor Networks" Wireless Personal Communications, vol 108, issue 2, September 2019, pp. 921-938.
- Ahmed ElSawy, Mazen Selim, Mahmoud Sobhy "A Hybridized Feature Selection Approach in Molecular Classification using CSO and GA", International Journal of Computer Applications in Technology, vol. 59, issue 2, 2019.
- Walid Osamy, Ahmed M. Khedr, Ahmed Aziz, Ahmed A. El-Sawy "Cluster-Tree Routing Based Entropy Scheme for Data Gathering in Wireless Sensor Networks", IEEE Access, Vol. 6, 2018.
- Ahmed ElSawy, mahmoud mossaa, Mahmoud Sobhy "Feature Selection approach for Chemical Compound Classification based on CSO and PSO", Journal of Convergence Information Technology, vol.13, issue 3, 2018, pp. 60-69.

- Ahmed El-Sawy, Mohamed Loey, Hazem EL-Bakry "Arabic Handwritten Characters Recognition using Convolutional Neural Network", WSEAS Transactions on Computers Research, vol. 5, 2017.
- Ahmed El-Sawy, Hazem EL-Bakry, Mohamed Loey "An Intelligent Agent Tutor System for Detecting Arabic Children Handwriting Difficulty Based on Immediate Feedback", WSEAS TRANSACTIONS on SYSTEMS, 2016, vol. 15.
- El-sawy, S.T. Aamer "Particle Swarm Optimization Technique to Determine Class Location in Illiteracy Problem" Research journal of applied sciences, 2016 vol 11(5).
- Walid Osamy, ahmed Elsayy "Genetic based algorithm for base-station position determination in wireless sensor networks" International Journal of Advancements in Computing Technology (IJACT),2016, vol 8 (5).
- El-sawy, S.T. Aamer "Solving Fuzzy Multi-Objective Non-Linear Illiteracy Problem via Fuzzy Ranking Functions and Particle Swarm Optimization", International Journal of Soft Computing, 2016, vol. 11(7).
- Hazem EL-Bakry Ahmed El-Sawy, Mohamed Loey "Arab Kids Tutor (AKT) System For Handwriting Stroke Errors Detection" International Journal Of Technology Enhancements And Emerging Engineering Research, vol. 4, issue 3, page 42-49, 2016.
- YM Assem, AA El-sawy, YA Nada "Standard Swarm Optimization to Solve Machine Scheduling Problem with Fuzzy Starting Time" International Journal of Computer Science Issues (IJCSI), vol. 11, issue 5, page 46, 2014.
- A. A. tharwat A. A. El-sawy "Hybrid Particle SWARM Optimization for Solving Machine Time Scheduling Problem", International Journal of Computer and Information Technology, vol. 2, issue 3, 2013.
- S. El-Zoghdy, M. Nofal, M.A. Shohla, A.A. Elsayy "An Efficient Algorithm for Resource Allocation in Parallel and Distributed Computing Systems", International Journal of Advanced Computer Science and Applications, 2013, vol. 4(2)
- M. A. Shohla, A. A. El-sawy, M. Nofal and S. F. El-Zoghdy " Using Hybrid Particle Swarm Optimization to solve Machine Time Scheduling Problem with Random Starting Time", IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 5, No 3, September 2012.
- A. El-sawy, A. A. Tharwat, A. A. Elshami, "Solving Stochastic Machine Time Scheduling Problem by Using Particle Swarm Optimization", International Journal of Computer Information Systems journal, Vol.2, No. 5, 2011, Pages: 13-17.
- A. El-sawy, A. A. Tharwat, "Comparison of Particle Swarm Optimization, Genetic Algorithm and Max Separable Technique for Solving Machine Time Scheduling Problem", International Journal of Computer Information Systems journal, Vol. 1, No. 3, 2010, Pages: 46-52.
- Tharwat, A. Abuel-yazid, "Multi-Cycles Machine Time Scheduling Problem", International Journal of Intelligent Computing and Information Science, Ain Shams University, Volume (2), Number (1), January 2002.

(b) Conference Papers

- Metwally Rashad, Gamal El-Nagar, Ahmed El-Sawy "An Efficient Model for Dynamic Video Summarization based-on Deep Visual Features" 2022 International Telecommunications Conference (ITC-Egypt),pp 1-6, IEEE, 2022.
- Walid Osamy, Ahmed Aziz, Ahmed A. Elsayy, Ahmed Salim, Ahmed Khedr "Energy Aware Disjoint Dominating Sets Algorithm for Heterogenous Wireless

Sensors Networks", conference on sensors, circuits & instrumentation systems, 2022.

- Daa Salama Abdelminaam, Nabil Neggaz, Ibrahim Abd Elatif Gomaa, Fatma Helmy Ismail, Ahmed Elsayy "AOM-MPA: Arabic Opinion Mining using Marine Predators Algorithm based Feature Selection", 2021 International Mobile, Intelligent, and Ubiquitous Computing Conference (MIUCC),pp 395-402, 2021/5/26, IEEE,2021.
- Ahmed El-Sawy, Hazem EL-Bakry, Mohamed Loey "CNN for Handwritten Arabic Digits Recognition Based on LeNet-5", Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2016, Advances in Intelligent Systems and Computing 533, Springer.
- S. A. Hassan, A.A. Tharwat, I.A. El-Khodary, A. A. El-Sawy, "Using Monte Carlo Simulation to Solve Machine Time Scheduling Problems with Stochastic Processing Time", 21th international conference of Mathematical and Economics, Prague, Czech, September 2003.
- Tharwat, A. Abuel-yazid, "Generalized Algorithm for Multi-Cycles Machine Time Scheduling Problem", Meaitip3 conference, Assuit University, December 2002.
- Tharwat and A. Abuel-Yazid "Multi-Cycles Machine Time Scheduling Problem", First International Conference on Informatics and Systems, Faculty of computer and information, Cairo, Egypt, 2002.

(c) Books/Book Chapters

- Walid Osamy, Ahmed Aziz, Ahmed A. Elsayy, Ahmed Khedr "Energy Aware Disjoint Dominating Sets Algorithm for Monitoring Application based Heterogenous Wireless Sensors Networks", book chapter, book title "Circuit,Sensors and Diagnosis" , Springer, accepted.