



CURRICULUM VITAE

Ass. Prof. Mina S. Younan



Personal Information:

- Date of Birth: 04/09/1988
- Marital Status: Married
- Nationality: Egyptian
- Mobile: (+2) 0127 3829 298
- Military Status: Completed military service from Jan. 2010 to Mar. 2011

Mailing Address:

- **Job Address:** Computer Science Department, Faculty of Computers and Information, Minia University, Minia, Egypt.
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1. Current Position:

Position	Faculty / University	Start Date
Ass. Prof. of Computer Science (with distinction)	Faculty of Computers and Information, Minia University, Egypt	Mar. 2026
Manager of Strategic Planning Unit		Sep. 2025
Coordinator of Cybersecurity Program		Sep. 2025
Director of the Software Center		Nov. 2024
Administrator for Thinq Platform		Jan. 2022
Delegated Lecturer for IT	Sadat Academy for Management Science, IT Dept., Minia, Egypt	Sep. 2022

2. Field of Specialization:

- **General specialization:** Computer Science.
- **Accurate specialization:** Internet of Things (IoT) and Artificial Intelligence (AI).

3. Professional Experience:

Title / Rank	Department: Institution / Faculty	From	To
Software Testing Trainer	Digital Egyptian Pioneers Initiative (DEPI), The Egyptian Ministry of Communications and Information Technology	Apr. 2024	Jan. 2025
Member of the electronic investigation committee	A case under the jurisdiction of Beni Suef Prosecution	2022	2022
Lecturer of IT	Sadat Academy for Management Sciences, IT Dept., Minia, Egypt	Sep. 2022	Now
Lecturer of Computer Science	Faculty of Computers and Information, Minia University, Egypt	Jan. 2021	Feb. 2026
Manager of Innovation and Entrepreneurship Unit		Oct. 2024	Jul. 2025
Manager of Strategic Planning Unit		Jan. 2021	Jul. 2025
Deputy Director of the Software Center		Jan. 2023	Nov. 2024
Assistant Lecturer		Jun. 2016	Dec. 2020
Demonstrator		Mar. 2011	Jun. 2016

4. Education:

Degree	Faculty / University	Date		Degree / Rank	
		From	To		
PhD. (Computer Science)	Faculty of Computers and Information, Minia University, Egypt	2018	2020	Awarded	
PhD. Preliminary Courses		2017	2018	95.0% (3.75)	1 st
PhD. Qualifying Exams	Faculty of Computers and Artificial Intelligence, Cairo University, Egypt	2017	2017	Qualified	
MSc. (Computer Science)		2013	2016	Awarded	
MSc. Preliminary Courses		2011	2012	89.0% (3.45)	2 nd
BSc. (Computer Science)	Faculty of Computers and Information, Minia University, Egypt	2005	2009	84.6% (3.23)	2 nd

5. Sample of Courses Taught:

Under Graduate Level, Faculty of Computers and Information	
1. Fundamentals of Computer Science	11. Simulation and Modeling
2. Software Engineering	12. Assembly Programming Language – x86
3. Object-Oriented Programming	13. Web Programming: Level-I (HTML, CSS, JavaScript)
4. Data Structures and Algorithms	14. Programming Languages (C++, C#, Java, Python)
5. Formal Languages and Automata	15. Database Management Systems
6. Theory of Computation	16. Introduction to Artificial Intelligence
7. Systems Analysis and Design	17. Cryptography
8. Programming in Logic (Prolog)	18. Fundamentals to Computer Networks
9. File Organization	19. Internet of Things (using Arduino)
10. Algorithms Design and Analysis (I)	20. Software Testing and Quality Assurance
Under Graduate Level, Sadat Academy for Management Sciences	
21. Business Modeling and Simulation	25. Information Storage and Retrieval
22. Data Structure	26. Information Management Strategy
23. Scientific Research Methods	27. Information Technology Project Management
24. Programming 1 (using C++)	28. Decision Support Systems
Post Graduate Level, Faculty of Computers and Information	
29. Theory of Computation	31. Advanced Software Engineering
30. Cryptography	32. Algorithms Design and Analysis (II)

6. PhD. Thesis (2020):

Title: Real-Time Resources Indexing for Internet of Things Applications

Summary: This thesis presents novel balanced indexing models for Internet of Things (IoT) resources, also presents static and dynamic communication models for reducing data transmission for increasing SThs life time. Algorithms of this models base on Dynamic Time Warping (DTW) for achieving similarity data fusion for IoT resources. These proposed algorithms are called time series Cluster Representatives (ClRe). This method reduces similar SThs indexing by $O(K-1)$, where K is number of time series in a cluster. Also this method enable building smart schedule for crawling SThs in IoT applications for keeping indexes as up-to-date as possible.

7. MSc. Thesis (2016):

Title: A Framework for Searching in the Web of Things

Summary: This thesis proposes a Web of Things Search Framework (WoTSF), its main idea is to keep indices as up-to-date as possible by proposing a two-layer architecture for the WoT Search Engine (WoTSE); (a) higher-level and (b) lower-level (LWoTSE). This two-layer architecture delegates the handling of the huge sensory data (potentially in different formats) to the local search engines (lower layer), while keeping compact global indices at the top layer (static and semi-dynamic). The second contribution of the thesis is designing, implementing and experimentally evaluating an integrated testbed for the WoT. This testbed was used to implement basis of the proposed WoTSF.

8. Research Interests and New Trends:

1. Internet of Things (IoT)
2. Artificial Intelligence (AI)
3. Wireless Sensor Network (WSN)
4. Blockchain
5. Intelligent Systems and Climate Change.

9. Publications:**Papers Published in Journals**

1. **Mina Younan**, Amir Mostafa, Mina Ezzat Attia, and Essam H Houssein “**Diabetes Challenges and Promising Solutions Based on the Internet of Medical Things, Blockchain, and Artificial Intelligence: A Systematic Literature Review**”, Cluster Computing, 2026.
2. Essam H Houssein, Mohamed Reda, Yaser Wazery, and **Mina Younan**, “**Fundamentals Applications of Blockchain Impact on Intelligent Healthcare Systems**”, Springer: Discover Internet of Things, Nov. 2026, DOI: <https://doi.org/10.1007/s43926-025-00252-z>
3. Essam H Houssein, Ibrahim A Ibrahim, Amir Mostafa, Abdullah M Albarrak, and **Mina Younan**, “**SMENN-hybrid: an efficient technique combining the synthetic minority oversampling technique with ensemble learning for diabetes prediction**”, Springer: Scientific Reports, Dec. 2025, 15 (43104), <https://doi.org/10.1038/s41598-025-26583-z>
4. Marwa M Emam, Mohammed R Saad, **Mina Younan**, Essam H Houssein, “**An efficient enhanced exponential distribution optimizer: applications in global, engineering, and combinatorial optimization problems**”, Journal of Big Data 12 (1), 90, 2025

5. Essam H. Houssein, Mohamed Reda, Yasser M. Wazery, and **Mina Younan**, "Chain of Things (CoT): A Blockchain-based Framework for Securing Internet of Things Applications", Journal of Computing and Communication Vol.4, No.1, PP. 1-18, 2025.
6. Essam H. Houssein, Mahmoud A Othman, Waleed M Mohamed, and **Mina Younan**, "Internet of Things in Smart Cities: Comprehensive Review, Open Issues and Challenges", IEEE-Internet of Things journal, <https://10.1109/JIOT.2024.3449753>, 2024.
7. Essam H. Houssein, Doaa A. Abdelkareem, Mohamed Abdel Hameed, Ibrahim A. Ibrahim, and **Mina Younan**, "An effective multiclass skin cancer classification approach based on deep convolutional neural network", Cluster Computing, April 2024, PP. 1-21, <https://doi.org/10.1007/s10586-024-04540-1>
8. Essam H. Houssein, Doaa A. Abdelkareem, Marwa M. Emam, Mohamed Abdel Hameed, and **Mina Younan**, "An efficient image segmentation method for skin cancer imaging using improved golden jackal optimization algorithm", Computers in Biology and Medicine (2022): 106075.
9. **Mina Younan**, Sherif Khattab, Reem Bahgat, " From the Wireless Sensor Networks (WSNs) to the Web of Things (WoT): An Overview", Journal of Intelligent Systems and Internet of Things (JISIoT), Vol. 4, No. 2, PP. 56-68, 2021, <https://10.5281/zenodo.5213301>
10. **Mina Younan**, Essam H Houssein, Mohamed Elhoseny, Abd El-mageid Ali, "Performance Analysis for Similarity Data Fusion Model for Enabling Time Series Indexing in Internet of Things Applications", PeerJ Computer Science, 2021.
11. **Mina Younan**, Mohamed Elhoseny, Abd El-Mageid A Ali, Essam H Houssein, "Data Reduction Model for Balancing Indexing and Securing Resources in the Internet of Things Applications", IEEE-Internet of Things journal, doi: <https://10.1109/JIOT.2020.3035248>, 2020.
12. **Mina Younan**, Essam H Houssein, Mohamed Elhoseny, Abdelmgeid A Ali, "Challenges and Recommended Technologies for the Industrial Internet of Things: A Comprehensive Review", Elsevier- Measurement, October, 2019.
13. **Mina Younan**, Sherif Khattab, Reem Bahgat, "Evaluation of An Integrated Testbed Environment for the Web of Things", in IntSys15v8n34 : International Journal on Advances in Intelligent Systems, v 8 n 3&4, Dec., 2015.

Papers Published in Conference Proceedings:

14. **Mina Younan**, Mohamed Elhoseny, Abdelmgeid A Ali, Essam H Houssein, " Quantum Chain of Things (QCoT): A New Paradigm for Integrating Quantum Computing, Blockchain, and Internet of Things ", the 17th International Computer Engineering Conference (ICENCO), pp. 101-106. IEEE, Egypt, Cairo, December, 2021.
15. **Mina Younan**, Essam H Houssein, Mohamed Elhoseny, Abd El-mageid A Ali, "Improved Models for Balancing Internet of Things Indexing Using Clusters Representatives", The 15th IEEE International Conference on Computer Engineering and Systems (ICCES 2020), pp. 1-6. IEEE, Egypt, Cairo, December, 2020.
16. **Mina Younan**, Sherif Khattab, Reem Bahgat, "A Framework for Searching in the Web of Things", The 10th International Conference on Informatics and Systems (INFOS 2016), ACM, Egypt, Cairo, May, 2016. (Awarded: Top 10).
17. **Mina Younan**, Sherif Khattab, Reem Bahgat, "An Integrated Testbed Environment for the Web of Things", in ICNS 2015 : The Eleventh International Conference on Networking and Services, ISBN: 978-1-61208-404-6, Rome, Italy, May, 2015, pp. 69-78. (Awarded: Top 10).

Papers Published as a Book Chapter:

18. Essam H. Houssein, Doaa A. Abdelkareem, Mohamed Abdel Hameed, and **Mina Younan**, "Biomedical Imaging Segmentation and Classification Framework Based on Soft Computing Techniques" in Machine Learning and Metaheuristics : Methods and Analysis, Springer, 2023.
19. Ahmed Mousa, Ahmed El-Sayed, Ali Khalifa, Marwa El-Nashar, Yousra Mancy Mancy, **Mina Younan**, Eman Younis, "BBMS: A Blood Bank Management System Based Internet of Things and Machine Learning Technologies" in Applications and Approaches to Object Oriented Software Design, Ch 08, IGI, www.igi-global.com, 2020.
20. Essam H. Houssein, **Mina Younan**, and Aboul Ella Hassanien, "Nature-Inspired Algorithms: A Comprehensive Review", in Hybrid Computational Intelligence Research and Applications , Ch 01, PP. 1-26, CRC Press, 2019.
21. **Mina Younan**, Sherif Khattab, Reem Bahgat, "A WoT Testbed for Research and Course Projects", in Managing the Web of Things: Linking the Real World to the Web, M. Kaufmann, Ch 06, PP. 181-204, Elsevier, October - 2017.

Academic Books:

22. Mina Younan, Introduction to x86 Assembly Language Programming: Concepts and Solved Examples, 2025 Oct 26.

10. MSc and PhD Supervision:

ID	Degree	Student	Thesis Title	Faculty/ University	State
1.	MSc.	Doaa A. Abdelkareem	Biomedical Imaging Segmentation and Classification Framework Based on Soft Computing Techniques	Faculty of Computers and Information, Minia University	Awarded, 2024
2.	MSc.	Mahmoud Abdelwahab	Securing Smart City Using Blockchain Technology		Awarded, 2025
3.	MSc.	Amir Mostafa Ahmed	A Blockchain-Based Internet of Medical Things Framework for Diabetes		Awarded, 2026
4.	MSc.	Nouran Mohamed Ali	Mitigation and Adaptation Solutions for Climate Crisis Using Internet of Things and Artificial Intelligence Technologies		In progress
5.	MSc.	Ali Moustafa	Balanced Secure AI Models for Internet of Medical Things (IoMT) Based Blockchain Systems		In progress
6.	MSc.	Fatema Ali	An Enhanced AI-Based Gene Selection Model for Improving Intracytoplasmic Sperm Injection (ICSI) Outcomes		Under Registration
7.	PhD.	Takwa Mohamed	A Data Fusion Model for Intelligent Transportation Systems (ITS)		In progress
8.	PhD.	Ibrahim Ramadan	Enhancing Security and Efficiency in Smart Governmental Services with Blockchain and Artificial Intelligence		In progress
9.	PhD.	Doaa A. Abdelkareem	Artificial Intelligence-Driven Prediction and Assessment of Climate Change Impacts on Crop Yield in Egypt		In progress

11. Reviewing Experience:

Publisher	Journal
IEEE	IEEE Internet of Things (IEEE-IoT), IEEE Access, IEEE Internet of Things Magazine, IEEE Transactions on Industrial Informatics
Springer	Discover Internet of Things, Discover Artificial Intelligence, Ambient Intelligence and Humanized Computing, Cluster Computing, Supercomputing, Knowledge and Information Systems
Elsevier	Engineering Applications of Artificial Intelligence
ACM	Transactions on Knowledge Discovery from Data
Other	Indonesian Journal of Electrical Engineering and Computer Science

12. Recent Competitions and Activities: Participated as a

Judge	<ol style="list-style-type: none"> 1. <u>Minia University</u>: Innovation 2024, and Innovation 2023 2. <u>International Science and Engineering Fair (ISEF)</u>: 2025, 2024, 2022, 2021, and 2020
Supervisor	<ol style="list-style-type: none"> 1. <u>In 2024/2025</u>: Smart Gate (won the 3rd place in the 7th Olympiad of Faculties of Computers and Information at Damanhour University “The role of AI in Supporting Government Institutions”). 2. <u>In 2022/2023</u>: Smart Transportation (YallaGo), Smart City (Optimal Electricity Utilization), and Stroke prediction ranked Top-10 3. <u>In 2020/2021</u>: Easy Sugar, ranked 1st in ITI Creativa Hackathon 2021. 4. <u>In 2018/2019</u>: Blood Bank (Point-of-life), reached Top-20 in DELL-EMC 2019 and ranked 1st in Egypt APP Cup 2019.
Trainer and Voluntair	<p>Workshop on Artificial Intelligence and the Internet of Things (IoT) for:</p> <ol style="list-style-type: none"> 1. Students of the Faculty of Pharmacy, Minia University 2. Minia Directorate of Youth and Sports 3. Students of STEM Schools 4. Charitable organizations, such as Al-Ghad Al-Moshreq Association for Development in Minia

13. Soft Skills:

1. Self-motivated
2. Good communication skills
3. Ability to work in a team or individually.
4. Ability to work under pressure.
5. Ability to enhance work with innovative ideas
6. Good research abilities
7. Interactive and fast enough to learn new technologies and sciences.

14. Languages:

1. Arabic: Native Language
2. English: Very Good (reading, writing and speaking)

References:

1. Google Scholar: <https://scholar.google.com/citations?user=dbM6gewAAAAJ&hl=en&oi=ao>
2. Researchgate: <https://www.researchgate.net/profile/Mina-Younan-4>
3. ORCID: <https://orcid.org/my-orcid?orcid=0000-0003-1195-6182>
4. Publons: <https://publons.com/researcher/3385894/mina-younan/>
5. GitHub: <https://github.com/MinaYounan-CS/>