

Sarah N. AbdulKader, Ph.D.

Associate Professor, Computer Science Dept., Faculty of Computers & Artificial Intelligence,
Helwan University - Cairo, Egypt.

Email: Nabil.sarah@gmail.com, Sarah_abdullah@fci.helwan.edu.eg

EDUCATION [ACADEMIC QUALIFICATIONS]

Computer Science Dept., Faculty of Computers & Artificial Intelligence, Helwan University,
Cairo, Egypt

- Ph.D. in Computer Science December 2012- October 2015
(Research)

Thesis: "Digital Static Authentication using Cognitive Biometrics"

- Pre-Ph.D. in Computer Science September 2011- May 2012
(Courses)
- M.Sc. in Computer Science April 2007- June 2011
(Research)

Thesis: "Managing Performance of Vehicle Ad hoc Network"

- Pre-M.Sc. in Computer Science September 2005- May 2006
(Courses)
- B.Sc. Honors in Computer Science September 2001 - May 2005
and Information Systems

Areas of Concentration: Computer Science

Minor: Information Systems

Selected Academic Courses: Artificial Intelligence, Computer Architecture, Computer Graphics, Database, Discrete Signal Processing, Management, Multimedia, Algorithms, Compilers, Networks, Object Oriented Programming, Operating Systems, Parallel Processing, Software Engineering, System Analysis, UML.

Degree Grade: Excellent with Honor – Class Rank: Second

Graduation Project/Honors Thesis: "Speech Recognition on Mobile" – Implemented Using: Symbian (Series60), VC++6, Matlab7.0 – Grade: Excellent.

ACADEMIC EMPLOYMENT [TEACHING & RESEARCH]

Computer Science Dept., Faculty of Computers & Artificial Intelligence, Helwan University, Cairo, Egypt and fully seconded to Faculty Computer Science, Misr International University (MIU).

- Associate Professor, Fully seconded to MIU– taught academic course Data Structures, Natural Language Processing, Human Computer Interaction”
2024- till now
- Associate Professor, Computer Science Dept., Faculty of Computers & Artificial Intelligence
2024- till now
- Assistant Professor, Fully seconded to AOU– taught academic courses: Learning and Information Technology, Introduction to Programming, Python Programming, Object-Oriented Programming using Java, “Web, Mobile and Cloud Technologies”
2019-2024
- Assistant Professor, seconded to MIU university- for academic courses: Compilers, Programming-2, and Graduation Projects
- Assistant Professor, seconded to BUE university, Faculty of Engineering- for academic course: Programming-1
- Assistant Professor in Helwan University– for academic courses: Compilers, Operating Systems-1, Programming languages-1, Programming languages-2, Computer Architecture and Data Structures.
2016-till now
- Member in Human Computer Interaction Laboratory (HCI lab.)
2013
- Teaching Assistant/Instructor – for academic courses: Networks, Digital Signal Processing, Digital Image Processing, Computer Architecture, Logic Design, Algorithms, and Data Structures.
2006-2015
- A member of a collaborative research project (KetApp) funded by Information Technology Industry Development Agency (ITIDA)
2016-2017
- Obtaining an ASRT grant of 50000L.E for a Co-Supervised graduation project with title “Etkalem MYO Language”
2017
- Deputy Executive Manager for Quality Assurance Unit
2016-2018
- Executive Manager for Quality Assurance Unit
2018-2019

SUPPLEMENTARY RELATED PROFESSIONAL EXPERIENCE AND TRAINING

- Obtaining the IBM Academic Certificate exam for Mobile Application Developer with Worklight Studio v6.2 2016
- Attending Digital Transformation Bootcamp offered by DELL EMC, January 2018.
- Obtaining CCNA certificate from Cisco Instructor academy 2020

SOME ATTENDED EVENTS

- Launch Ceremony of Huawei ICT academy Ambassadors Program 2022
- Tech Seminar "How to Manage Cybersecurity as a Strategic Business Issue - IT/OT Convergence" from Fortinet Egypt 2023

SELECTED PUBLICATIONS

In Peer Review Journals

- Iraky H. Khalifa, Mohammed H. Haggag, and Sarah N. Abdulkader, "Responsibility Factor in Hierarchical Road-Based Routing For Vehicular Communication," *Egyptian Computer Science Journal*, vol. 36, May 2011.
- Sarah N. Abdulkader, Ayman Atia, and Mostafa-Sami M. Mostafa, "Authentication systems principles and threats". *Computer and Information Science*, Vol. 8, No (3), 2015.
- Sarah N. Abdulkader, Ayman Atia, and Mostafa-Sami M. Mostafa, "Brain computer interfacing: applications and challenges" *Egyptian Informatics Journal*, Volume 16, Issue 2, Pages 213-230, July 2015.
- Abdula, Yosra N., S. Abdel-Mageid, R. A. Ramadan, Afaf A. Nada, Marwa A. Elshahed, Sarah N. Abdulkader. "An Intelligent Spelling Framework Based on Brain-Computer Interface." *Journal of Scientific Research in Science(JSRS)* ISSN 2356-8372, Volume 34, part1, 2017, Page 194-215.
- Y. S. I. Hamed, S. N. A. AbdulKader, and M.-S. M. Mostafa, 'Mobile malware detection: A survey', *International Journal of Computer Science and Information Security (IJCSIS)*, vol. 17, no. 1, 2019.
- Moatasem M Draz, Marwa S Farhan, Sarah N Abdulkader, and M G Gafar, "Code Smell Detection Using Whale Optimization Algorithm", in *Computers, Materials & Continua (CMC)*, Volume 68, No 2, April 2021. DOI: <https://doi.org/10.32604/cmc.2021.015586>
- Yehia A. Soliman, Sarah N. Abdulkader, Taha M. Mohamed, "Constructing A Cohesive Pattern for Collective Navigation Based on A Swarm of Robotics", in *PeerJ Computer Science*, Volume 7, July 2021. DOI: <https://doi.org/10.7717/peerj-cs.626>

- Mostafa Ibrahim Labib, Mohamed ElGazzar, Atef Ghalwash, and Sarah Nabil Abdulkader, "An efficient networking solution for extending and controlling wireless sensor networks using low-energy technologies", in PeerJ Computer Science, Volume 7, November 2021. DOI: <https://doi.org/10.7717/peerj-cs.780>
- Eslam Fayez, Amal Elsayed Aboutabl, and Sarah N. Abdulkader, "Automated detection of fake news", in the International Journal of Informatics and Communication Technology (IJ-ICT), Volume 12, No 1, April 2023. DOI: <http://doi.org/10.11591/ijict.v12i1.pp79-84>
- Reham Mohamed Abdulhamied, Mona M Nasr, and Sarah N Abdulkader, "Real-time recognition of American sign language using long-short term memory neural network and hand detection", in Indonesian Journal of Electrical Engineering and Computer Science (IJECS), Vol. 30, No. 1, April 2023. DOI: <http://doi.org/10.11591/ijeecs.v30.i1.pp545-556>
- Sarah N. Abdulkader, Taha M. Mohamed, "Enhancing User Experience Via Calibration Minimization Using ML Techniques", in the International Journal of Advanced Computer Science and Applications (IJACSA), Volume 14, No 7, July 2023. DOI: <http://doi.org/10.14569/IJACSA.2023.0140750>
- Taha M. Mohamed and Sarah N. Abdulkader, "A Novel Deep Learning Model for Raisin Grains Classification", in The Journal of Theoretical and Applied Information Technology, Volume 101, No 21, November 2023

In International Conference Proceedings:

- Sarah N Abdulkader, Ayman Atia, Mostafa-Sami Mostafa, "Single trial authentication with mental password writing", HCII 2015 , Lecture Notes in Computer Science Volume 9190, 2015, pp 3-12
- Mostafa Labib, Atef Ghalwash, Sarah Abdulkader, and Mohamed Elgazzar, "Networking solutions for connecting bluetooth low energy devices-a comparison" In MATEC web of conferences. EDP Sciences. Volume 292, September 2019. DOI: <https://doi.org/10.1051/mateconf/201929202003>.

REVIEWING ACTIVITIES

In Journals:

- Egyptian Informatics Journal
- Journal of Health Education Research & Development
- British Journal of Mathematics & Computer Science
- IEEE Computational Intelligence Magazin.

In Conferences:

- Intelligent Methods, Systems, and Applications conference
- International Mobile, Intelligent, and Ubiquitous Computing Conference MIUCC 2024

TECHNICAL [COMPUTER] SKILLS

Languages

- Proficient in: Matlab, java, C/C++, Python.
- Familiar with: C#, Visual Basic, Visual C++, Visual Prolog.

Software

- Database: Microsoft SQL Server and Microsoft Access.
- Network Simulator - ns-2
- Openvibe Software

LANGUAGES

Arabic: Mother language

English: Excellent

PERSONAL DATA

Nationality: Egyptian.

Gender: Female.

REFERENCES

Prof. Mostafa-Sami M. Mostafa {mostafa.sami@fci.helwan.edu.eg} – Professor at Computer Science Department, Faculty of Computers & Artificial Intelligence, Helwan University, Cairo, Egypt.

Prof. Ayman Ezzat {ayman@fci.helwan.edu.eg} –Professor at Computer Science Department, Faculty of Computers & Artificial Intelligence, Helwan University, Cairo, Egypt and Fully seconded to MSA.

More References are furnished upon request.

الصورة الشخصية	ساره نبيل عبدالله عبدالقادر	الاسم
	Sarah Nabil Abdullah	Name
	Sarah N. AbdulKader	الاسم المستخدم في النشر العلمي
	استاذ مساعد جامعه حلوان	الوظيفة الحالية وجهة العمل
	دكتوراه في علوم الحاسب جامعه حلوان جمهوريه مصر العربيه	الدرجة العلمية (اسم الجامعة والدولة)
	علوم الحاسب	التخصص العام
	علوم الحاسب	التخصص الدقيق
	Sarah_abdullah@fci.helwan.edu.eg	البريد الإلكتروني
	<ul style="list-style-type: none"> Ph.D. in Computer Science (Research) December 2012- October 2015 <p>Thesis: "Digital Static Authentication using Cognitive Biometrics"</p> <ul style="list-style-type: none"> Pre-Ph.D. in Computer Science (Courses) September 2011- May 2012 M.Sc. in Computer Science (Research) April 2007- June 2011 <p>Thesis: "Managing Performance of Vehicle Ad hoc Network"</p> <ul style="list-style-type: none"> Pre-M.Sc. in Computer Science (Courses) September 2005- May 2006 B.Sc. Honors in Computer Science and Information Systems September 2001 - May 2005 <p>Areas of Concentration: Computer Science Minor: Information Systems</p>	المؤهلات العلمية
		السيرة الذاتية

In Peer Review Journals

- Iraky H. Khalifa, Mohammed H. Haggag, and Sarah N. Abdulkader, "Responsibility Factor in Hierarchical Road-Based Routing For Vehicular Communication," *Egyptian Computer Science Journal*, vol. 36, May 2011.
- Sarah N. Abdulkader, Ayman Atia, and Mostafa-Sami M. Mostafa, "Authentication systems principles and threats". *Computer and Information Science*, Vol. 8, No (3), 2015.
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- Abdula, Yosra N., S. Abdel-Mageid, R. A. Ramadan, Afaf A. Nada, Marwa A. Elshahed, Sarah N. Abdulkader. "An Intelligent Spelling Framework Based on Brain-Computer Interface." *Journal of Scientific Research in Science(JSRS)* ISSN 2356-8372, Volume 34, part1, 2017, Page 194-215.
- Y. S. I. Hamed, S. N. A. Abdulkader, and M.-S. M. Mostafa, 'Mobile malware detection: A survey', *International Journal of Computer Science and Information Security (IJCSIS)*, vol. 17, no. 1, 2019.
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- Yehia A. Soliman, Sarah N. Abdulkader, Taha M. Mohamed, "Constructing A Cohesive Pattern for Collective Navigation Based on A Swarm of Robotics", in *PeerJ Computer Science*, Volume 7, July 2021. DOI: <https://doi.org/10.7717/peerj-cs.626>
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- Eslam Fayez, Amal Elsayed Aboutabl, and Sarah N. Abdulkader, "Automated detection of fake news", in the *International Journal of Informatics and Communication Technology (IJ-ICT)*, Volume 12, No

الأبحاث المنشورة

	<p>1, April 2023. DOI: http://doi.org/10.11591/ijict.v12i1.pp79-84</p> <ul style="list-style-type: none"> • Reham Mohamed Abdulhamied, Mona M Nasr, and Sarah N Abdulkader, "Real-time recognition of American sign language using long-short term memory neural network and hand detection", in Indonesian Journal of Electrical Engineering and Computer Science (IJECS), Vol. 30, No. 1, April 2023. DOI: http://doi.org/10.11591/ijeecs.v30.i1.pp545-556 • Sarah N. Abdulkader, Taha M. Mohamed, "Enhancing User Experience Via Calibration Minimization Using ML Techniques", in the International Journal of Advanced Computer Science and Applications (IJACSA), Volume 14, No 7, July 2023. DOI: http://doi.org/10.14569/IJACSA.2023.0140750 • Taha M. Mohamed and Sarah N. Abdulkader, "A Novel Deep Learning Model for Raisin Grains Classification", in The Journal of Theoretical and Applied Information Technology, Volume 101, No 21, November 2023 <p><u>In International Conference Proceedings:</u></p> <ul style="list-style-type: none"> • Sarah N Abdulkader, Ayman Atia, Mostafa-Sami Mostafa, "Single trial authentication with mental password writing", HCII 2015 , Lecture Notes in Computer Science Volume 9190, 2015, pp 3-12 • Mostafa Labib, Atef Ghalwash, Sarah Abdulkader, and Mohamed Elgazzar, "Networking solutions for connecting bluetooth low energy devices-a comparison" In MATEC web of conferences. EDP Sciences. Volume 292, September 2019. DOI: https://doi.org/10.1051/mateconf/201929202003. 	
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