Saad Mohamed Saad Darwish, Ph.D.

- Associate Professor of Computer Science, Department of Information Technology, Institute of Graduate Studies and Research (IGSR), University of Alexandria.
- Birth Date: 1/9/1972
- Marital Status: Married
- Birth Place: Desouq-Kafer El-Sheikh
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Education:

- Ph.D. In Information Technology 2006, Institute of Graduate Studies and Research, Alexandria University, Egypt. Thesis Title:" Developing an Image Description Scheme by Utilizing Image Transforms for Pictorial Data Mining".

- M.Sc. In Information Technology 2001, Institute of Graduate Studies and Research, Alexandria University. Thesis Title: "Transformation – Based Image Compression: Use of Wavelet Transform in Image Compression".

- Diploma of Information Technology 2000 with excellent grade, Institute of Graduate Studies & Research, University of Alexandria, Egypt.

- B.Sc. In Statistics & Computer Science 1994-1995 with very good grade, Faculty of Science, Alexandria University, Egypt.

Employment Record:

- Working as a Demonstrator in the Department of Information Technology, IGSR from 1998 to 2001.
- Working as an Assistant Lecturer in the Department of Information Technology, IGSR from 2001 to 2005.
- Working as an Assistant Professor in the Department of Information Technology, IGSR from 2005 until Jun. 2012.
- Working as an Associate Professor in the Department of Information Technology, IGSR from Jun. 2012 until now

Past and Current Teaching:

(Post Graduate)

Problem Solving Techniques	2008, 2009, 2010
Advance Database Processing	2009, 2010,2015
Advance Programming	2008
System Security	2009,2013,2015
Computer and Network Security	2007,2015
Communication and Computer Networks	2008
Neural Networks & Genetic Algorithms	2009,2013
Database Mining	2010,2012
Software Engineering Using Ada	2010, 2012
Computer Simulation	2012
Pattern Recognition	2012
Data Mining and Data Warehouse	2011
Computer Vision	2012,2014,2015
Advanced Distributed Systems	2012
Data Encryption and Compression	2013
E-Commerce Systems	2013
Image Processing, Graphics and Visualization	2015
Bioinformatics	2015 Higher Institute of Medical Research

(Under Graduate)

Database systems	(4th year- Faculty of Science)	2009,2010,2014
Computer Graphics	(4th year- Alexandria Higher Institute of Engineering and Technology (AIET))	2010
Computing Systems Evolution	(4th year –AIET)	2010,2013
Distributed Systems	(4th year –AIET)	2010,2014
Formal Language	(3rd year –AIET)	2009,2012,2014
Computer Architecture	(3rd year –AIET)	2009,2015
Data Structures	(2nd year –AIET)	2007, 2009
Computer Network Architecture	(3rd year- Faculty of Science)	2011,2012,2015
Expert Systems	(4th year –AIET)	2013,2014
Decision Support Systems	Sadat Academy for Management sciences	2013
Object-Oriented Databases	Sadat Academy for Management sciences	2013
C#	Sadat Academy for Management Sciences	2013,2015
Artificial Intelligent	(4th Year- Faculty of Commerce)	2013
Security	Sadat Academy for Management sciences	2015

Research Interests:

- Digital Image Processing - Database Management - Information Security

- Intelligent Systems - Web Technology - Data Mining - Networking

Supervision Record

- **Ph.D. Students (4 finished theses and 14 under supervision)**
  - Wireless Security, Image Watermarking, Grid Computing, 3D image Fusion, Software Quality Assurance, Mobile Cache Management, Database Security, Credit card fraud detection, Data mining optimization, Fuzzy Data Mining, Image Annotation, Networking Protection, Semantic grid, Encryption, Vehicle Detection, DNA Classification .

- **Master Students (19 finished theses and 20 under supervision)**
  - Database intrusion detection, Code obfuscation, Textile recognition, Intelligent multi-agent system, Image data hiding, Temporal data mining, Electronic banking security, Arabic characters recognition, Augmented Reality, SQL Injection, Documents retrieval, Query Optimization, Medical 3D image Classification, XML database Retrieval, e-cash Security, e-bay Recommender system

Conferences Attending

- 1st International Conference on Electronic Design (ICED'08), Penang, Malaysia, Dec. 1- 3 2008.
- 1st International Conference on Soft Computing and Pattern Recognition (SoCPaR2010), Paris, France, 7-10 Dec. 2010
- 5th International Conference on Computer Engineering and Technology (ICCET'13), Vancouver, Canada, 13-14 April 2013.
- 3rd Annual Conference on Engineering and Information Technology (ACEAIT), Osaka, Japan, 22-24 March 2015.

Publications

Conferences:

[1] Ezzat A. Korany, Mohamed M. El-Serbiny, and **Saad M. saad** "Utilization and Performance Study of the Second Generation Wavelet Coding for Compression of Satellite Images" Asia-Pacific Radio Science Conference, Chuo University, Tokyo Japan, August 1-4, 2001.

[2] M. A. El-Iskandarani, **Saad Darwish**, and Saad M. Abuguba, " A Robust and Secure Scheme for Image Transmission over Wireless Channels", The 42nd IEEE International Carnahan Conference on Security Technology (ICCST'08), Prague, Czech Republic, 13-16 October, pp. 51-55, 2008. *IEEE Xplore.*

[3] M. A. El-Iskandarani, **Saad M. Saad**, and Ahmed M. Abubahia, " An Efficient Digital Image Watermarking Scheme", The 42nd IEEE International Carnahan Conference on Security Technology (ICCST'08), Prague, Czech Republic, 13-16 Oct., pp. 37-42, 2008. *IEEE Xplore.*

[4] **Saad M. Saad**, "Towards Robust and Flexible Blind Watermarking System for Copyright Protection of 3D Models", International Conference on Electronic Design (ICED'08), Penang, Malaysia, Dec. 1- 3 2008. *IEEE Xplore.*

[5] M. A. El-Iskandarani, **Saad Darwish**, and Saad M. Abuguba, "Capacity and Quality Improvement in Blind Second Generation Watermarking", 43rd Annual International Carnahan Conference on Security Technology (ICCST'09), Zurich, Switzerland, 5-8 Oct., pp. 139-143, 2009. *IEEE Xplore.*

[6] M. A. El-Iskandarani, **Saad Darwish**, and Saad M. Abuguba," Reliable Wireless Error Correction Technique for Secure Image Transmission", 43rd Annual International Carnahan Conference on Security Technology (ICCST'09), Zurich, Switzerland, 5-8 Oct., pp. 184-188, 2009. *IEEE Xplore.*

[7] **Saad M. Darwish**, Shawkat K. Guirguis and Mohamed S. Zalat, "Stealthy Code Obfuscation Technique for Software Security", 6th International Conference on Computer Engineering and Systems (ICCES'2010), pp. 93-99, Cairo, Egypt, Nov. 30- Dec. 1 2010. *IEEE Xplore.*

[8] **Saad M. Darwish**, Mohamed M. El-Sherbiny, and Amr El shenawy, "Intelligent Multi-Agent System for Information Monitoring", 10th International Conference on Intelligent Systems Design and Applications (ISDA'2010), pp. 1436-1441, Cairo, Egypt, Nov. 29- Dec. 1 2010. *IEEE Xplore*.

[9] **Saad M. Darwish**, "An Optimized Fingerprinting System for Tamper Proof and Copy Control of XML Documents", International Conference on Soft Computing and Pattern Recognition (SoCPaR2010), pp. 454-457, Paris, France, 7-10 Dec. 2010. *IEEE Xplore*.

[10] **Saad M. Darwish**, "Intelligent Copyright Protection Framework for Irregular Large 3D Meshes", International Conference on Soft Computing and Pattern Recognition (SoCPaR2010), pp. 436-441, Paris, France, 7-10 Dec. 2010. *IEEE Xplore.*

[11] Noha Kalifa, **S. M. Darwish**, and M. A. El-Iskandarani, "Automated Textile Defects Recognition System Using Computer Vision and Interval Type-2 Fuzzy logic", 1st IEEE International Conference on Innovative Engineering Systems (IEEE-ICIES), pp.148-153, Alexandria, Egypt, 7- 9 Dec. 2012. *IEEE Xplore*.

[12] Mohamed A. El-Iskandarani, **Saad M. Darwish**, Marwan A. Hefnawy, " Drug Consumption Prediction through Temporal Pattern Matching", International Conference of Data Mining and Knowledge Engineering (ICDMKE), World Congress on Engineering , 3-5 July, 2013, London, U.K., pp. 1486-1492, IAENG (ISBN: 978-988-19251-0-7).

[13] **Saad M. Darwish**, Shawkat K. Guirguis, and Wesam A. Alatafy," An Enhanced Steganographic System for Data Hiding in True Color Images", The Second International Conference on Informatics Engineering & Information Science (ICIEIS2013), Kuala Lumpur, Malaysia, Nov. 12-14, 2013, pp. 75-83. ISBN: 978-0-9891305-2-3 ©2013 SDIWC.

[14] **Saad M. Darwish**, Shawkat K. Guirguis, and Mahmoud H. Ghozlan," Intrusion Detection in Role Administrated Database: Transaction- Based Approach", 8th International Conference on Computer Engineering & Systems (ICCES'2013), 26-28 Nov. 2013, Cairo, Egypt, pp.73-79, (*IEEE Xplore*) .

Journals:

[1] Saad M. Saad, Shawkat K. Guirguis, and Ashraf M. Emam, " An Efficient Contour based Shape Descriptor for Representation and Classification of Medical Images", Mansoura Engineering Journal (MEJ), Vol. 31, No. 1, pp. 9-16, March 2006.

[2] Saad M. Saad, Shawkat K. Guirguis, and Ashraf M. Emam, "An Approach based on Lifting Wavelet Salient Points for Content-based Image Description", Alexandria Engineering Journal, Vol. 45, No. 1, pp.93-101, Jan. 2006.

[3] S. M. Saad, "Design of a Robust and Secure Digital Signature Scheme for Image Authentication over Wireless Channels", IET Information Security, Vol. 3, Issue 1, pp. 1-8, March 2009.

[4] M. A. El-Iskandarani, **Saad Darwish**, and Saad M. Abuguba, "Combination of 2D Chaotic Encryption and Turbo Coding for Secure Image Transmission", International Journal of Computer Science and Network Security (IJCSNS), Vol. 10, No.11, pp. 179-187, Nov. 2010.

[5] Saad M. Saad, "Application of Fuzzy Logic and Genetic Algorithm in Biometric Text-Independent Writer Identification", IET Information Security, Vol.5, Issue 1, pp. 1-10, March 2011. (*IEEE Xplore*)

[6] Saad M. Darwish, and Ahmed M. Hassan, "A Model to Authenticate Requests for Online Banking Transactions", Alexandria Engineering Journal, Vol. 51, Issue 3, pp. 185-191, Sep. 2012. (*Elsevier*).

[7] Saad M. Darwish," A New System to Fingerprint XML Documents Using Winnowing Theory", IET Signal Processing, Vol. 6, Issue 4, pp. 348-357, June 2012. (*IEEE Xplore*).

[8] Saad M. Darwish, "A Methodology to Improve Cash Demand Forecasting for ATM Network", International Journal of Computer and Electrical Engineering, Vol.5, No.4, pp. 405-409, Aug. 2013.

[9] Saad Mohamed Darwish," Soft Computing Applied to the Build of Textile Defects Inspection System", IET Computer Vision, Volume 7, Issue 5, pp. 373-381, October 2013. (*IEEE Xplore*).

[10] Saad M. Darwish," Multi-level Fuzzy Contourlet-based Image Fusion for Medical Applications", IET Image Processing, Volume 7, Issue 7, pp. 694-700, October 2013. (*IEEE Xplore*)

[11] Saad M. Darwish, and Ali H. Mohammed, "Interval Type-2 Fuzzy Logic to the Treatment of Uncertainty in 2D Face Recognition Systems," International Journal of Machine Learning and Computing, Vol.4, No. 1, pp. 24-30, Feb. 2014.

[12]Saad M. Darwish, Magda M. Madbouly, and Mohamed A. El-Hakeem, "A Database Sanitizing Algorithm for Hiding Sensitive Multi-Level Association Rule Mining," International Journal of Computer and Communication Engineering, Vol. 3, No. 4, pp. 285-293, July 2014.

[13] Saad M. Darwish, Adel A. El-Zoghabi, and Oday A. Hassen, "A Modified Walk Recognition System for Human Identification Based on Uncertainty Eigen Gait," International Journal of Machine Learning and Computing, Vol.4, No. 4, pp. 346-353, August 2014.

[14] Saad M. Darwish, Tamer F. Mabrouk, and Yasser F. Mokhtar," Enriching Vague Queries by Type-2 Fuzzy Orderings", Lecture Notes on Information Theory Vol. 2, No. 2, pp. 177-185, June 2014.

[15] Saad M. Darwish, Magda M. Madbouly, Eman Abd-El Reheem, " Contribution to Collaborative Filtering Based on Soft Computing to Enhance Recommender System for e-Commerce," International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 4, No. 4, pp. 257-270, August 2014.

[**16**] **Saad M. Darwish**, Adel A. El-Zoghabi, and Mohammed A. Abdewi, " Database Encryption Using Fuzzy Chaotic", International Journal of Future Computer and Communication, Vol. 3, No. 6, pp. 436-443, Dec. 2014.

[**17**] **Saad M. Darwish**, Adel A. El-Zoghabi, and Marwan H. Hassan, "Soft Computing for Database Deadlock Resolution", International Journal of Modeling and Optimization, Vol. 5, No. 1, pp. 15-21, Feb. 2015.

[**18**] **Saad M. Darwish** and Raad A. Ali, "Observations on Using Type-2 Fuzzy Logic for Reducing Semantic Gap in Content–Based Image Retrieval System", International Journal of Computer Theory and Engineering, Vol. 7, No. 1, pp. 1-8, Feb. 2015.

[**19**] Ali A. Ali, **Saad M. Darwish**, and Shawkat K. Guirguis ," An Approach for Improving Performance of a Packet Filtering Firewall based on Fuzzy Petri Net", Journal of Advances in Computer Networks, Vol. 3, No. 1, pp. 67-74, March 2015.

[**20**] Mahmoud M. Gabr, **Saad M. Darwish**, and Sayed A. Mohsin, "An Efficient Compression Algorithm for Uncertain Databases Aimed at Mining Problems", Lecture Notes on Software Engineering, Vol. 3, No. 2, pp. 157-163, May 2015.