

C.V.

Name : Assoc. Prof. Dr. Eng. Hesham N. Elmahdy (*Computer Sciences and Information Systems Consultant*)

Religion : Moslem.

Address : 4 Ala Elbeet Street, Adj. To the Armed Forces Hospital in Elmaadi,
Dar-Elssalam, Cairo, Egypt. (post # : 11434).
or 5 Dr Ahmed Zewail Street, Cairo University Post Office, 12613, Giza.

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Phone # (Fax#) : +202 25246276 (Home) +2012 – 2511 - 654 (Cel. Phone).

Marital Status : Married & has 3 sons.

Birth Day : September 16, 1958.



Current Position :

1. Associate Professor, Information Technology Department, Faculty of Computers and Information (FCI) Cairo University, Giza, Egypt.
2. FCI Scientific Associations Advisor (since Jan. 2007).
3. Computer Sciences and Information Systems Consultant to some Tempus Projects (Assuit University), HEEPF Projects in Cairo University and United Nations Developing Project.
4. E-Learning Scientific Advisor in The Open University Center of Cairo University (since Sep. 2009).

Previous Position :

- 1- A Supreme Committees Member of Cairo University: Conferences and Exhibitions Committee, Society Services and Environment Development Committee, and E-Learning Project (2007).
- 2- Consultant to Cairo University Vice President (as a member of technical office of research centers and the units of special natures – from November 2005 till August 2008).

Some Distinct Activities in E-Learning:

1. Dr. Hesham has leading a team to developing the E-learning courses of a one year diploma in E-learning in the Open University Center of Cairo University since September 2009. The site for the e-learning diploma is <http://itechnology.fci.cu.edu.eg/>.
2. Dr. Hesham was awarded the prize of “The Best Innovative Ideas to Develop Cairo Universities” in August 2009.
3. Dr. Hesham was invited by the ISESCO to evaluate the utilization of the E-learning and web technology in the Arabic and Islamic countries (The first time in Cairo from 27 to 31 October 2007, the second time in Rabat - Kingdom of Morocco from 15 to 16 November 2007, third time in Damascus, Syria July 13-15, 2009).
4. Dr. Hesham taught a short course named "How to Develop Your Course in E-learning Environment" for three groups in the "Arab Council for Graduate Studies and Scientific Research, Cairo". In 2008 and 2009.
5. He prepared the bylaw of a one year diploma in E-learning in the Open University Center of Cairo University. This diploma has been proposed starting from this academic year (Academic year 2009-2010).
6. He held many introductory session of E-learning using MOODLE in many places: The Military Technical Collage, Faculty of Computers and Information (Cairo University, Ain Shams University, and Asuit University).

7. In April 2008, he was invited by Petra University in Jordan to teach a four days course of how to use MOODLE for developing a course management system for faculties.
8. He co-organized The First International Conference of Information and Communication Tech. in Pre-University Education, Ministry of Education, Cairo, 22-24 April, 2007.
9. He developed three E-courses using Pleiad for the Avicenna Projects (Internet Technology, Computer Graphics, and Introduction to Information Technology).
10. He published a paper titled: "**Evolution of Information and Communication Technology in Education** –in Arabic Language", *The First International Conference of Information and Communication Tech. in Pre-University Education, Ministry of Education, Cairo, 22-24 April, 2007.*
11. Dr Hesham was chosen as an E-learning Supreme Committee Member of Cairo University to test and approve the e-learning courses of all faculties in 2006-2007. (Cairo University has targeted 10% of its courses to be transferred into e-learning). He pushed the idea of using MOODLE for developing and managing courses.
12. He was an invited speaker in the Fifth International Conference in Internet Education, "**Evolution of E-Learning in Egyptian Universities,**" *The Human and Technology Development Foundation, Cairo, Sep. 2006.*
13. UNISCO Cairo office invited him to co organize and to teach a short course in developing an E-learning course for high school teachers (250) in the Egyptian Ministry of Education for three days, in Mobarak City for Education, 6th. of October City, Nov. 14-16, 2006.
14. Dr. Hesham has been using "MOODLE" in teaching his courses in The Faculty of Computers and Information, Cairo University. He developed seven e-courses since 2006.(Computer Graphics, Internet Technology, E-learning, Computers and Communication, Design of Information Systems, Multimedia.
15. In 2006, he served as a Computer Science and Information Systems Consultant to some Tempus Projects (Assuit University), HEEPF Projects in Cairo University and United Nations Developing Project.
16. He co-organized The First International Conference on Virtual Universities, Avicenna Knowledge Center – Egypt, 13 June 2006.
17. In 2005, Dr. Hesham was chosen as a consultant to the E-learning center of Cairo University (a project sponsored by the Euro TEMPUS).
18. He published a paper titled "**Open Source in Practice,**" in *The Symposium of Open Source Software and Its Quality ,Scientific Researches Academy, Cairo, Jun 13, 2005.*
19. He co-advised a graduation project in designing and implementing an E-learning system in 2002.
20. He has applied those ways in his courses since 2001 (starting his new career in Ain Shams University, Faculty of Computers and Information Sciences). He has continued this methodology starting from 2003 when he started working in Cairo University in Sep. 2003.
21. Dr. Hesham published another paper titled "**Preparing the Environment of Information Systems in Teaching institute for the 21st. Century**" in the Journal named *Technology and Armament Magazine for Egyptian Armed Forces, Cairo, July. 1999.* (In Arabic Language).
22. Dr Hesham N. Elmahdy published a paper titled "**Developing the Ways of Teaching Using the Internet,**" in the conference held in Cairo university *Developing Ways of Teaching :A Vision to Future University Conference, , pp. 605-614, May. 1999.* (In Arabic Language). He proposed the mentioned ideas to be applied in The Military Technical College as a prototype in 1999.

Editor in Chief of an International Journal:

Journal of Computer Networks and Internet Research (CNIR) <http://www.icgst.com/CNIR.html> from Dec. 2004 to Jan. 2009).

Heading sessions in International Conferences:

- 1- **Information Security and Cryptography**, during The Forty One Conference on Statistics, Computer Science, and Operations Research, The Institute of Statistical Studies and Research (ISSR), Cairo University, Cairo, Egypt, 3-6 Dec 2006.
- 2- **Programmable Devices, Circuits and Systems**, The International Congress for Global Science and Technology (ACSE, AIML, and ARAS) Conference, www.icgst.com, Dec. 19-21, 2005, Cairo.
- 3- **Information Systems for the Environment**, The Forty International Conference of Statistics, Computer Science, and Operations Research, ISSR, Cairo University, Dec. 4-6., 2005.
- 4- **Intelligent Systems**, The 7th International Conference on Intelligent Engineering Systems (INES 2003), Assiut, Egypt, March 4-6, 2003.

Web Architect of International Conferences:

1. The Fourth International Conference of Informatics and Systems, Cairo University, Mar 25-27, 2006 <http://www.fci-cu.edu.eg/INFOS2006/>.
2. The Third International Conference of Informatics and Systems, Cairo University, Mar 19-22, 2005 <http://www.fci-cu.edu.eg/INFOS2005/>.
3. The First International Conference on Intelligent Computing and Information Systems (ICICIS 2002), Ain Shams University, Faculty of Computer and Information Sciences, Cairo, Egypt, June 24-26, 2002.

International Program Committee Reviewer (Journals and Conferences):

1. The IEEE Transactions on Wireless Communications (since April 2008).
2. The IASTED International Conference on Communications and Computer Networks (CCN 2006), which is to take place in Lima, Peru from October 04-06, 2006.
3. The IASTED International Conference on Internet and Multimedia Systems and Applications (EuroIMSA 2006), February 13-16, Innsbruck, Austria.
4. IEEE Computer (<http://www.h-elmahdy.net/ieee.jpg>).
5. The International Arab Journal of Information Technology (<http://www.iajit.org/>).
6. The Egyptian Informatics Journal, Faculty of Computers and Information, Cairo University.
7. The International Journal on Artificial Intelligence and machine learning (AIML) Committee (<http://www.icgst.com/committee/aimlCom.html>). <http://www.icgst.com/AIML.html>.
8. The International Congress for Global Science and Technology (ICGST) general steering committee (<http://www.icgst.com/committee/icgstcom.html>). <http://www.icgst.com/>, Germany.
9. The Forty International Conference of Statistics, Computer Science, and Operations Research, ISSR, Cairo University, Dec. 3rd., 2005.
10. The Third International Conference of Informatics and Systems, Cairo University, Mar 19-22, 2005 <http://www.fci-cu.edu.eg/INFOS2005/>.
11. The IASTED International Conference on Internet and Multimedia Systems and Applications (EuroIMSA 2005), Grindelwald, Switzerland from February 21-23, 2005. Dr. Hesham was invited as a speaker in that conference to share his expertise by planning a tutorial or organizing special session regarding his current research.
12. The 2nd IASTED International Conference on Communication and Computer Networks (CCN 2004), which is to take place in MIT Cambridge, USA from November 8- November 11, 2004.
13. The 8th IASTED International Conference on INTERNET & MULTIMEDIA SYSTEMS & APPLICATIONS (IMSA 2004), August 16-18, 2004, Kauai, Hawaii, USA.

14. The Second International Conference on Informatics and Systems (INFOS 2004), FCI, Cairo University, March 6-8, 2004.
15. IASTED International Conferences on Computer Systems and Applications March 30 - April 2, 1998, Irbid, Jordan.
16. The International Arab Journal of Information Technology (<http://www.iajit.org/>).

Invitations to Organize Special Session or Tutorial in International Conferences:

- 1- **Internet Crimes and how to face them**, in The Faculty of Science, Cairo University, Cairo, Egypt, May. 18th., 2009.
- 2- **Internet Crimes and how to face them**, in The Central Library, Cairo University, Cairo, Egypt, Apr. 30th., 2009.
- 3- **Internet Crimes and how to face them**, during The Forty One Conference on Statistics, Computer Science, and Operations Research, The Institute of Statistical Studies and Research (ISSR), Cairo University, Cairo, Egypt, 3-6 Dec 2006.
- 4- **Voice and Video over IP Applications**, The 10th World Multi-Conference on Systemic, Cybernetics and Informatics: WMSCI 2006 Jointly with The 12th International Conference on Information Systems Analysis and Synthesis: ISAS 2006 July 16-19, 2006 – Orlando, Florida, USA.
- 5- **Semantic Web**, The Forty International Conference of Statistics, Computer Science, and Operations Research, ISSR, Cairo University, Dec. 5th., 2005.
- 6- Managing a Special Session on “**Internet Security and Cryptography**”, during The International Artificial Intelligence and Machine Learning Conference, AIML-05 Cairo, Egypt, 19-21 Dec. 2005. (<http://www.icgst.com/aiml/InternetSecurity.html>).
- 7- The IASTED International Conference on Internet and Multimedia Systems and Applications (EuroIMSA 2005), which is to take place in Grindelwald, Switzerland from February 21-23, 2005.

Consultant to Ministries and other Entities:

- 1- The Egyptian Ministry of High Education (Evaluating their web site) Jan 2006.
- 2- "Ibn Sina" (The Distance Learning Project – A Joint Project between Cairo University and The European Union).
- 3- The Egyptian Ministry of Local Development (Technical Evaluation of the Ministry Portal Proposals – Sponsored by the United Nations Development Projects (UNDP) – May 2005).
- 4- The Higher Education Ministry Projects (HEEPF): The Faculty of Veterinary and Faculty of Cultivation - Cairo University Feb 2005.
- 5- Open University, Cairo University from April to Sep 2004.
- 6- Ain Shams University Educational Networks (ASUNET) from Sep 2002 to Sep 2003.
- 7- The Egyptian Ministry of Education (from Feb. 2001 to Sep 2003).

Organizing Workshops “The Use of Free and Open Source Software (FOSS)” (Apache, MYSQL, and PHP) in the following Institutions/events:

1. The Faculty of Science, Cairo University, Feb. 20th, 2009.
2. The Faculty of Computers and Information, Cairo University, Sep 20th, 2008.
3. The Faculty of Computers and Information, Cairo University, Sep 24th, 2007.
4. The University of Petra in Jordan (E-Learning using MOODLE) for three days: April 20-22, 2008.
5. The Arab Academy for Science, Technology, and Maritime Transport, Egypt, Nov. 5th.., 2006.

6. The Faculty of Computers and Information, Cairo University, Sep 20th, 2006.
7. The Faculty of Computers and Information, Cairo University, Jun. 13th, 2006.
8. The Arab Academy for Science, Technology, and Maritime Transport, Egypt, Feb. 19th, 2006.
9. The International Academy for Media Science (IAMS), Egypt, Feb. 18th, 2006.
10. The Faculty of Computers and Information, Cairo University, Dec. 4th, 2005
11. Information Technology Institute, Ministry of Communication and Information Technology, Cairo, Egypt, Sep. 28th, 2005.
12. Faculty of Cultivation, Ain Shams University, Sep. 28th, 2005.
13. The Arab Academy for Science, Technology, and Maritime Transport, Egypt, Sep. 25th, 2005.
14. The Faculty of Computers and Information, Cairo University, Jun. 11th, 2005.
15. The Arab Academy for Science, Technology, and Maritime Transport, Egypt, Mar. 27th, 2005.
16. The International Academy for Media Science (IAMS), Egypt, Feb. 19th, 2005.
17. The Faculty of Veterinary, Cairo University, Feb. 13th, 2005.
18. The Arabian Scout Organization (12 Arabian Countries representatives) Jan. 5th, 2005.
19. The Institute of Statistical Studies and Research, Cairo University, The Thirty Ninth International Conference, Dec. 14th, 2004.
20. The Egyptian Ministry of Education, Dec. 9th, 2004.
21. Department of Information Systems, Egyptian Ministry of Defense, Dec 2nd, 2004 (a special session for the distinguished programmers of the department).
22. Military Technical College (MTC), Cairo, Egypt Nov 24th, 2004 (a special session in the Third Scientific Conference of the MTC Nov 23-25, 2004).
23. The Faculty of Computers and Information, Cairo University, Nov 22nd, 2004.
24. The Arab Academy for Science, Technology, and Maritime Transport, Egypt, Oct. 10th, 2004.
25. Misr University for Science and Technology, Egypt, Oct. 12th, 2004.

Organizing and Managing Symposiums:

1. The Faculty of Computers and Information, Cairo University , "Youth Health, Birth Control, and Parity Problems," with the Cooperation of the Ministry of Health and Population, Nov. 30th., 2004.
2. Mobile Third Generation and its Environmental and Health Effects, Faculty of Computers and Information, Cairo University, Nov. 22nd., 2004. (Sponsored by Mobinil).

Published Books:

- 1- Hesham N. Elmahdy, "Internet Technology: Web/WAP Enabled Applications," October 2006.
- 2- Co-author, "Computer" : Primary, Prep, and Secondary Schools (Ministry of Education-five books) starting from 2001 till 2006.

Reviewing Books:

- 1- Hesham N. Elmahdy, "Verbal Communication," The Egyptian Ministry of Higher Education, 2006-2007.

Publishing Articles in International and Local Newspapers and Magazines:

- 3- The Mississippian, Jan 1997.
- 4- Elaalam Elyoum, Jun .11th. 2001
- 5- Ashark Elawsat, Aug. 29th., 2002.

- 6- Itsalat Elyoum, Nov. 29th., 2002.
- 7- Loghat Elaasr Magazine, Dec. 2003.
- 8- Alakhbar, Sep. 14th., 2004.
- 9- Elmessaa, Aug., 21st., 2005.

Education:

- 1- Ph. D. in Computer Science :
From : University of Mississippi, School of Engineering, Computer Science Department, USA.
Diss. Title : Virtual Entities as a Model For Transmission Of Multimedia Across Networks.
Date : Dec. 1997.
- 2- Master of Science in Computer Science :
From : University of Mississippi, School of Engineering, Computer Science Department, USA.
Date : Aug. 1996.
- 3- Master of Science in Computer Science :
From : Cairo University, Institute of Statistical Studies and Research, Computer Science Department, Cairo, Egypt.
Thesis Title : A Knowledge Base System for Representing Islamic Jurisprudence Knowledge and Understanding Arabic Natural Language Query.
Date : June. 1992.
- 4- Diploma in Computer Science :
From : Cairo University, Institute of Statistical Studies and Research, Computer Science Department, Cairo, Egypt.
Evaluation : Very Good with Honor Degree.
Order : First Student of the colleagues
Date : May. 1984.
- 5- B. Sc. In Mechanical Engineering (Automotive):
From : The Military Technical College, Cairo, Egypt.
Evaluation : Excellent with Honor Degree.
Order : First Student of the colleagues
Date : July. 1981.

Training :

- 1- Oracle Course
In : Giza Systems Education Center. Date : Jan. 2000 (for three weeks).
- 2- Advanced Logistics Course
In : University of Pennsylvania, USA. Date : Dec. 1999 (for three weeks).
- 3- Apple Macintosh (4th. Dimension, Excel, Alnasher Almakthy, Network) courses.
In : PACC EGYPT Education Center. Date : July. 1993 (for three weeks).
- 4- Short Term Course on IBM ES 9000 series with MVS/ESA and working with RACAF Security System
In : IBM (Egypt Branch) Education Center. Date : Aug. 1992 (for three weeks).
- 5- IBM Education Course: CSP Education
In : IBM (Egypt Branch) Education Center. Date : Aug. 1991 (for three months).
- 6- Logistics Management Development
In : Logistics Management College, Fort Lee, VA, USA. Date : May 1990 (for two months).
- 7- IBM Database 2
In : IBM (Egypt Branch) Education Center. Date : Jul. 1989 (for two months).

- 8- IBM Training Courses (VMS and IBM 4381).
In : Newcumberland Army Depot, Pennsylvania, USA. Date : May 1987 (for 10 months).
- 9- IBM Training Courses (VMS and IBM 4381).
In : IBM (Egypt Branch) Education Center. Date : May 1986 (for 5 months).
- 10- Basic Programming.
In : Institute of Information Systems. Date : Feb 1985 (for 1 month).
- 11- Basic Technical Courses of Information Systems.
In : The Military Technical College, Cairo. Date : May 1984 (for 10 months).
- 12- Cobol Programming.
In : The Central Authority of General Mobilization and Statistics, Cairo, Egypt.
Date : June 1982 (for 3 months).

Important Note:

He got the highest score in the course of planning and preparing faculties of Ain Shams University (about 500 faculty members). Aug. 24 to Sep. 10, 2001. He has been selected to teach that course starting from 2002.

Publications:

1. Hussein H. Maza'ar, and **Hesham N. Elmahdy**, "A Novel Image Recovery Against Lost Descriptions in Mesh Networks," *The 27th National Radio Science Conference, Faculty of Electronic Engineering, Menoufia University, Menouf, Egypt*, 16-18 March 2010.
2. Hussein Maza'ar, and **Hesham N. Elmahdy**, "Multiple Description Image Network Coding Against Single Link Failure in Mesh Networks," *The IEEE 3rd. International Conference on Multimedia Systems Architecture and Application (IMASS09)*, Bangalore, India, 9-11, Dec. 2009.
http://ieeexplore.ieee.org/search/freesrchabstract.jsp?reload=true&tp=&arnumber=5439472&queryText%3Dmaza'ar%26openedRefinements%3D*%26searchField%3DSearch+All
3. Taha Mahdy, **Hesham N. Elmahdy**, and Hoda Onsi, "A Real Time Watermarking Algorithm for H.264," *under review*.
4. **Hesham N. Elmahdy**, "Smart Confronting of Web Sites That Militating Our Holy Koran," *under review*.
5. **Hesham N. Elmahdy**, "Sign Translation of The Holy Koran," *under review*.
6. **Hesham N. Elmahdy**, "A Real Time Scheduling Scheme in Wireless Sensor Networks," *The Egyptian Computer Science Journal (ECS Journal)*, ISSN-11102586, vol. 23, no. 1, May, 2009.
7. **Hesham N. Elmahdy**, and Mohamed Loey Ramdan, "Improving the Performance of Anti-GPS Signal," *The 11th WSEAS International Conference on AUTOMATIC CONTROL, MODELLING and SIMULATION (ACMOS '09)*, Istanbul, Turkey, May 30 - June 1, 2009.
8. Nour Eldeen Mahmoud, and **Hesham N. Elmahdy**, "The Impact of Frame Rate on Securing Real Time Transmission of Video over IP Networks," *The IEEE International Conference on Networking and Media Convergence (ICNM'09)*, pp:57-61, Cairo, Egypt, March 24-25, 2009.
9. **Hesham N. Elmahdy**, "Integrated Arabic Closed Caption Synchronization with Arabic Sign Language by Using SMIL," *The International Conference on Intelligent Computing and Information Systems CICS*, pp:89-100, Cairo, March 19-22, 2009.
10. **Hesham N. Elmahdy**, and Mohamed H. N. Taha, ""The Impact of Packet Size and Packet Dropping Probability on Bit Loss of VoIP Networks," *ICGST International Journal on Computer Network and Internet Research*, CNIR, vol. 8, no. 2, January 2009.
11. Ensaf A. Alzurqa, **Hesham N. Elmahdy**, Gamal Darwish, "Improved and Simple Scheduling Scheme for Real-Time Data Communication in Wireless Sensor Networks," *INTERNATIONAL JOURNAL of COMPUTERS*, ISSN: 1998-4308, <http://www.naun.org/journals/computers/ijcomputers-110.pdf>, Vol. 2, no. 1, pp: 462-469, 2008.
12. Ensaf A. Alzurqa, **Hesham N. Elmahdy**, and Gamal Darwish, "SES-SN: Simple and Efficient Scheduling Scheme in Sensor Networks," *The 8th WSEAS International Conference on APPLIED INFORMATICS AND COMMUNICATIONS*, Rodos, Island, Greece, pp.: 240-246, August 20-22, 2008.
13. **Hesham Elmahdy**, Iman Ali, Mohamed Elshrkawey and Abdelatif Elkouny, "Minimal Cost Clock Synchronization Using a Sender-Receiver Protocol in Wireless Sensor nets," *The IEEE 2008 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS 2008)*, Edinburgh, UK, June 16-18, 2008.

14. Ensaf A. Alzurqa, **Hesham N. Elmahdy**, and Gamal Darwish, "**Improved Scheduling Scheme for Real-Time Data Dissemination in Wireless Sensor Networks**," under review *The IEEE Transactions on Wireless Communications*, manuscript ID: Paper-TW-Nov-07-1319 (since Nov. 26th, 2007).
15. Hesham N. Elmahdy, Mohamed Aly Elsharkawy, Imane Aly Tharwat, and Abdelatif A. Elkouny, "**Secure Scalable Video Transcoding Over Wireless Network**," The 2007 IEEE International Conference on Intelligent Computer Communication and Processing, Cluj-Napoca, ISBN: 978-1-4244-1491-8, pp: 287-292, 6-8 Sept. 2007.
16. Hesham N. Elmahdy, "**Merging of Informatics Methodology into Educational Administration**," *The Regional Education Experts Meeting to Exchange Administrative Applications Experience, ISESECO*, Cairo, October 27-31, 2007, (in Arabic Language).
17. Hesham N. Elmahdy, "**Employment of Information Technology Applicable Methodologies in Managing Educational Cybernetics**," *The Regional Education Experts Meeting to Exchange Administrative Applications Experience, ISESECO*, Cairo, October 27-31, 2007, (in Arabic Language).
18. Yasser k. Ali, **Hesham N. Elmahdy**, Sanaa El Olla Hanfy Ahmed "**Mobile Agents Migration in Peer-To-Peer Based On Machine Learning**," *The 17th international conference on Computer Theory and Applications, ICCTA 2007*, 1-3 September 2007, Alexandria, Egypt.
19. Yasser k. Ali, **Hesham N. Elmahdy**, Sanaa El Olla Hanfy Ahmed "**Optimizing Mobile Agents Migration Based on Decision Tree Learning**," *The Proceedings of The World Academy of Science, Engineering and Technology*, <http://www.waset.org/pwaset/v22.html> , Prague, Czech Republic, volume 22, ISSN: 1307-6884, pp: 564-570, July 2007.
20. **Hesham N. Elmahdy**, Mohamed A. El Sharqawy , Imane Tharwat, and Abdelatif A. Elkouny, "**Selective Encryption for Transcoding Secure Scalable Video Stream across Wireless Network**," *The International Journal of Intelligent Computing and Information Sciences IJICIS*, http://www.ijicis.net/Vol6_No1%20No16.pdf, Vol.6, No. 1, pp:211-223, JANUARY 2006.
21. Hesham N. Elmahdy "**Evolution of Using Information Technology in Education**," *The Proceedings of The First International Conference of Information and Communication Technology in Pre-University Education*, Mobarak Education City, 6th. October City, Egypt, April 22-24, 2007, (in Arabic Language).
22. Yasser kamal Ali, **Hesham N. Elmahdy**, Sanaa E. Hanafy, "**A Mobile Agent Framework–Based Metadata Representation**," The *ICGST International Journal on Computer Networks and Internet Research (CNIR)*, GVIP Vol 5, No.2, pp. 15-25, June_2006.
23. **Hesham N. Elmahdy**, Imane Tharwat, Abdelatif A. Elkouny, Mohamed A. El Sharqawy, "**A Transcoding Technique for Secure Scalable Stream**," *The International Journal of Intelligent Computing and Information Sciences* , Vol. 6 No. 1, January, 2006.
24. **Hesham N. Elmahdy**, Mahmoud A. Moneim, "**Synchronization of Arabic Closed Captioning with Sign Language**," *The Egyptian Computer Science Journal*, Vol. 28 No. 1, January, 2006.
25. Hesham N. Elmahdy, "**Open Source in Practice**," *The Symposium of Open Source Software and Its Quality Scientific Researches Academy*, Cairo, Jun 13, 2005.
26. Hesham N. Elmahdy, "**Mobile I-ServiceDelivery and Human Resources** ," *The Third International Conference of Informatics and Systems (INFOS2005)*, pp 263-271, Mar 19-22, 2005- Republished on the *ICGST International Journal on Computer Networks and Internet Research (CNIR)*, GVIP Vol 5, No.1, pp. 27-35 Dec., 2005.
27. Sherif Sobhi, Reda H. Serig, Hesham N. Elmahdy, and Sanaa E. Hanafy, "**Steady State Analysis for Firewall System**," *Scientific Bulletin (Part II Electronic Engineering)*, vol. 39, No.4, pp 511-526 Ain Shams Faculty of Engineering Journal, Cairo, EGYPT, December 2004.
28. Sherif Sobhi, Hesham N. Elmahdy, Reda H. Serig, and Sanaa E. Hanafy, "**Transient State Analysis of a Firewall System**," *ICENCO'2004, the 1st International Computer Engineering Conference New Technologies for the Information Society*, pp 63-67, Faculty of Engineering, Cairo University, Cairo, EGYPT, December 27-30, 2004.
29. Hesham N. Elmahdy, and Ali A. Fahmy, "**Evaluation of WebCam Architecture Challenges**," *Computer Science and Engineering Journal CSE (ACSE-AIML-GVIP)*, *ICGST International Congress for Global Science and Technology, Tübingen, Germany, volume v1, pp 1-7 (GVIP)*, Dec. 2004.

30. Hesham N. Elmahdy, "**Web Supported Medical Education and Teaching**," *The IASTED International Conference on Communications, Internet, and Information Technology (CIIT 2003)*, ISBN: 0-88986-398-9, pp 49-53, ,Scottsdale, AZ, USA, November 17 – 19, 2003.
31. Hesham N. Elmahdy, "**Medical Diagnosis Enhancements Through Artificial Intelligence Techniques**," *INES 2003, the 7th International Conference on Intelligent Engineering Systems*, Assiut, Egypt, March 4-6, 2003.
32. Hesham N. Elmahdy, "**Web Enabled Education and Teaching**," *Technology and Health Care archive, Special Issue: Quality-e-Health*, ISSN:0928-7329, Vol. 10 , No. 6, pp:481-482, Dec. 2002.
33. Hesham N. Elmahdy, "**Web Enabled Education and Teaching**," *MEDNET2002, The 7th Annual World Conference on the Internet and Medicine Amsterdam, Netherlands*, Dec. 5-7, 2002.
34. Hesham N. Elmahdy, "**Arabization of Sciences, as a Main Directory in Distance Learning**," *The Annual Conference of The Egyptian Society of Arabization of Sciences*, Jan 27, 2002. (in Arabic Language).
35. Hesham N. Elmahdy, "**Crossing Safely to The 21st Century and Facing its Technology Threatening**," *The 2nd. International Conference of Electrical Engineering*, The Military Technical College, Cairo, Egypt, Nov. 22-25, 1999. (In Arabic Language).
36. Hesham N. Elmahdy, "**Preparing the Environment of Information Systems in Teaching institute for the 21st. Century**," *Technology and Armament Magazine for Egyptian Armed Forces*, Cairo, July. 1999. (In Arabic Language).
37. Hesham N. Elmahdy, "**Developing the Ways of Teaching Using the Internet**," *Developing Ways of Teaching :A Vision to Future University Conference*, Cairo University, pp. 605-614, May. 1999. (In Arabic Language).
38. Hesham N. Elmahdy, and P. Tobin Maginnis, "**Virtual Entities as a Model For Transmission Of Multimedia Across Networks**," *IASTD International Conference on Networks and Communication Systems*, Pittsburgh, Pennsylvania, USA, May, 1998.
39. Hesham N. Elmahdy, "**Machine Learning Applications in Medical Diagnosis**," *IASTD International Conference on Computer Systems and Applications*, Yarmouk University in Lrbid, Jordan, April. 1998.
40. Hesham N. Elmahdy, and P. Tobin Maginnis, "**Fax Transmission Across Network**," *The Egyptian Computer Journal*, pp. 119-135, ISSR, Cairo, vol. 25, no. 2, 1997.
41. Hesham N. Elmahdy, P. Tobin Maginnis, "**Improving Fax Transmission Performance**," *The 1997 International Symposium on Multimedia Information Processing*, pp 318-325, Academia, Sinica Taipei , Taiwan, Dec. 11-13, 1997.
42. Hesham N. Elmahdy, Mervat H. Gheith, Aly A. Fahmy, "**A Knowledge Base System for Representing Islamic Jurisprudence Knowledge and Understanding Arabic Natural Language Query**," *The Association of Using Arabic Language in Information Technology*, Saudi Arabia, May. 1992. (In Arabic Language).
43. Hesham N. Elmahdy, Mervat H. Gheith, Aly A. Fahmy, "**How to get benefits from Artificial Intelligence in the Countries of Arabic Co- operation Counsel**," *The Association of the Inhabitation of in the Countries of Arabic Co-operation Counsel*, Cairo, Mar. 11-12, 1990. (In Arabic Language).
44. Hesham N. Elmahdy, and Mervat H. Gheith, "**Comparative Study of Knowledge Representation**," *Egyptian Computer Journal* , Vol. 13 No . 2 ,pp 60-78, Dec. 1985.

Past Experience:

1- Teaching Computer Science Courses:

Course Name	Institution	Semesters + Audience
Fuzzy Logic	Faculty of Computer and Information Sciences, Cairo University. Premaster	1. 2009-2010
Theory of Information Systems Design itechnology.fci.cu.edu.eg	Faculty of Computers and Information, Assuit University Pre-Master (by Video Conference)	1. 2009-2010 2. 2008-2009 3. 2007-2008

E-Commerce itechnology.fci.cu.edu.eg	Faculty of Computers and Information, Assuit University 4 th . year (by Video Conference)	1. 2009-2010
Information Management Systems	Sadat Academy	1. 2007-2008 first semester – Third Level MIS
Virtual Reality (IT431)	FCI-CU	1. 2006-2007 second semester – Fourth year IT
Internet Technology (IT223) itechnology.fci.cu.edu.eg	Faculty of Computer and Information Sciences, Cairo University (FCI-CU)+ The Syrian University at Ellazikia (Open University)	1. 2009-2010 first semester – Third Level 2. 2008-2009 first semester – Third Level 2. 2007-2008 first semester – Third Level 3. 2006-2007 first semester – Third Level
Computer Graphics (IT331) itechnology.fci.cu.edu.eg	FCI-CU	1. Second 2008-2009 – Third Level (IT+CS) 2. Second 2007-2008 – Third Level (IT+CS) 3. Second 2006-2007 – Third Level (IT+CS) 4. Second 2005-2006 Third Year (IT) 5. First 2005-2006- Third Year (IS+CS) 6. Second 2004-2005-Third Year (IT) 7. First 2004-2005-Third Year (IS+CS) 8. Second 2003-2004-Third Year (IT)
Data Communication IT221	FCI-CU	1. Fall 2005 – Second Level
Database	ITI	1. Fall 2005 – MSc Preliminary Year
Software Systems & their Development (M301)	The Arab Open University	1. Fall 2005 – Third Level
Learning Online : Computing with confidence (TU170)	The Arab Open University	1. Fall 2005 – First Level
Report Writing	FCI-CU	1. Spring 2005 – First year
Information Systems Management (F811) http://www.h-elmahdy.net/ISM/	The Arab Academy for Science, Technology, and Maritime Transport	Fall 2006, Spring 2006, Spring 2005, Fall 2005
Multimedia (EF715) http://www.h-elmahdy.net/f715/	The Arab Academy for Science, Technology, and Maritime Transport	Fall 2006, Spring 2006, Fall 2005, Spring 2005, Fall 2004, Spring 2004, Fall 2003, Spring 2003, Fall 2002.
Design and Programming of Multimedia (MMI 308). http://www.geocities.com/mmi308/	The International Academy for Media Science (IAMS)	1. Spring 2005.
E-Commerce http://www.geocities.com/ecommerce/ust/	Misr University of Science and Technology	1. Fall 2004.
Internet Technology http://www.geocities.com/internet/ust/	Misr University of Science and Technology	1. Fall 2004.
Introduction to Information Systems	Faculty of Computers and Information, Assuit University	1. First Semester 2003-2004 (Second Year).
Web Design http://www.h-elmahdy.net/web/	FCI-CU	1. Second 2003-2004 - Third Year (IS). 2. Second 2002-2003 - Third Year (IS).
Cognition http://www.h-elmahdy.net/cognition/	FCI-CU	1. First 2003-2004 (Post Graduate-IT).
Data Structure and Program Design	The Faculty of Computer and Information Sciences, Ain Shams University (FCIS-ASU)	1. First 2002-2003 (Post Graduate). 2. First 2001-2002 (Post Graduate).
Office Automation (Multimedia) http://www.geocities.com/inf483/	FCIS-ASU	1. Second 2002-2003 (Fourth Year-IS). 2. Second 2001-2002 (Fourth Year-IS).
Advanced Multimedia http://www.geocities.com/inf483/	FCIS-ASU	1. First 2002-2003 (Post Graduate-IS). 2. First 2001-2002 (Post Graduate-IS).
Technical Report Writing http://www.h-elmahdy.net/hum212/	FCIS-ASU	1. Second 2002-2003 – Second Year. 2. Second 2001- 2002 – Second Year.
System Analysis and Design http://www.geocities.com/inf381	FCIS-ASU	1. Second 2001-2002 (Post Graduate – Faculty of Arts). 2. First 2001-2002.
System Analysis and Design http://www.geocities.com/inf381	October 6 University	1. Spring 2002 (Faculty of Engineering). 2. Spring 2002 (Institute of Engineering).
Computer Graphics	October 6 University	1. Fall 2001 (Faculty of Engineering).

http://www.geocities.com/inf482/		2. Fall 2001 (Institute of Engineering).
Operating Systems	The Institute of Statistics Studies an Researches, Cairo University	1. First 2000 – 2001 Post Graduate.
Computer Networks	The Institute of Statistics Studies an Researches, Cairo University	1. First 2000 – 2001 Post Graduate.
Java Programming	The Institute of Statistics Studies an Researches, Cairo University	1. Second 2004 – 2005 Post Graduate.
Programming Language For Networks (JAVA)	The Military Technical College.	1. Second 1999 – 2000 (Fourth Year). 2. Second 1998 – 1999 (Fourth Year).
Introduction to Computers and Pascal Programming	The Military Technical College.	1. Second 1999 – 2000 (First Year). 2. Second 1998 – 1999 (First Year).
Operating Systems (Assistant)	University of Mississippi	1. Fall 1997. 2. Spring 1997. 3. Fall 1996. 4. Spring 1996.
Computer Networks (Assistant)	University of Mississippi	1. Fall 1997. 2. Spring 1997. 3. Fall 1996. 4. Spring 1996.

Also, teaching many Courses in the Ministry of Higher Education Programs (FLDP and ICTP) in 2005, 2006, and 2007.

2- Developing eCourses Using MOODLE and Pleiad Course Management Systems:

<http://itechnology.fci.cu.edu.eg/>

- a- Introduction to Computers and Information Technology.
- b- Computer Graphics.
- c- Internet Technology.
- d- Computer Communication.
- e- Multimedia.
- f- An Introduction to Digital Environments for Learning.
- g- Effective Course Design for E-learning.
- h- Developing Digital Learners.
- i- Understanding Learning in The Online Environment.
- j- Ethics and Values.
- k- E-Commerce.
- l- Information Systems Design.
- m- Fuzzy Logic.

3- Advising Post Graduate Researches:

- a- PhD:
 - i. **Performance Analysis for E-Commerce Security(Finished in June 2006).**
 - ii. **Secured Video Stream Across Wireless Networks(Finished in July 2007).**
 - iii. **Enhanced Mobile Agent Performance in Distributed Systems Environment(Finished in April 2008).**
 - iv. Quality of Service in Voice over IP.
 - v. Designing Robust Watermarking System for Real Time Video, Oct 2006.
 - vi. **Improved Scheduling Scheme for Real-Time Data Dissemination in Wireless Sensor Networks (finished in October 2009).**
 - vii. Management of QoS in Mobile Ad Hoc Networks.
 - viii. Improving Intrusion Detection and Prevention Performance.
- b- M. Sc.:
 - i- **Synchronization of Arabic closed Caption with Sign Language (finished Mar 2008).**
 - ii- An Improved Video-Content Search utilizing Enhanced Arabic Text.
 - iii- An Efficient Algorithm for Synchronization of Embedded Messages in Arabic Closed Caption.
 - iv- Optimization of Traffic Path Thru WebCam Snap Shots.
 - v- QoS of WebCam Thru Mobile Browsers.
 - vi- Comparative Evaluation of Electronic Cash Payment Systems, with A Proposed Scheme.
 - vii- **Systems Analysis: Tools, Methodologies, and Modeling (Finished in Sep 2005 – from Syria, In the Faculty of Science – Cairo University).**
 - viii- **Improving Efficiency of Secure Video over IP Transmission (to be finished in May 2009).**
 - ix- Quality of Service in Video over IP.

- x- **Improving The Performance of The Anti-Global Positioning System (finished in Jun 2009).**
- xi- Improving Mobile Search on The Web.
- xii- **Subjective Quality of Service in Voice over IP (finished in Mar 2009).**
- xiii- Improving Object Detection and Tracking in Video.

4- Managing, Designing, Re-Engineering, and Architecture of Web Sites :

- a- The Scientific Societies of the Faculty of Computers and Information, Cairo University, since December 2007.
- b- The Islamic Society of Education, Science, and Culture (ISESCO) E-Gate since Nov. 2007.
- c- The Arab Council for Graduate Studies and Scientific Research (ACGSSR) since October 2007.
- d- The news and service on the Cairo University web site <http://cuweb.fci.cu.edu.eg/> from July 2007.
- e- The E-Learning site of the Faculty of Computers and Information, Cairo University <http://elearning.fci.cu.edu.eg/> from February 2007.
- f- The Egyptian University Sports Federation (EUSP) and its Squash International Championship (under construction now) from September 2007.
- g- The Fourth International Conference of Informatics and systems, Faculty of Computers and Information, Cairo University, Mar 25-27, 2006, <http://www.fci.cu.edu/INFOS2006/>.
- h- Amro Ibn Elaas Mosque Web Site <http://www.amribnelaas.com/> From February 2006.
- i- The Third International Conference of Informatics and systems, Faculty of Computers and Information, Cairo University, Mar 19-20, 2005, <http://www.fci.cu.edu/INFOS2005/>.
- j- WAP result of the Faculty of Computers and Information, Cairo University <http://www.fci.cu.edu/WAP> , you should have a Mobile Life subscription and student-ID to get a result on your mobile.
- k- Semester Results on the web of undergraduate students of the Faculty of Computers and Information, Cairo University, Feb. 2005, <http://www.fci-cu.edu.eg/examsresult/>.
- l- Cairo University – Open University E-Learning Center (TEMPUS Project)
- m- Egypt, June 2004 <http://www.h-elmahdy.net/eleg/>
- n- Cairo University – FCI-Dean follow-up visitors (using PHP+MYSQL)
- o- Egypt, Sept 2004.... <http://www.fci-cu.edu.eg/fcicu/>
- p- Ain Shams University – From Oct. 2002 till Mar 2004, <http://asunet.shams.eun.eg/>
- q- The Faculty of Computer and Information Sciences, Ain Shams University, including the results of all grades. <http://asunet.shams.eun.eg/fcis.htm>
- r- The First International Conference on Intelligent Computing and Information Systems, Cairo, Egypt, June 2002 <http://www.fcisainshams.net/icicis2002>

5- Supervising B.Sc. Graduation Projects :

- Voice over IP, Video over IP, BlueTooth Server, WAP site of FCI.
- Doctor Online, Middle East Crises Management, Arabic Web Browser.
- Hardware Implementation of Encryption/Decryption Algorithms.
- Pharmacy Online, Smart Map, I-University, I-Library.
- E-World Cup 2010, WebCam Service Providing, E-Service Disk.
- E-Export Center, E-Live Business, Arabic Closed Caption.
- Distance Learning, Egyptian Antivirus, Video in demand.
- E-Hospital, Arabic Search Engine, LAN Monitoring.
- E-Press Publishing Center, Voice Over IP.
- Radio Frequency Identification Application.
- WebCam Streaming, VoiceXML, Remote Voice Command Thru Mobile
- Multimedia based tele-operation, Mobile Agents.

6- Supervising Preliminary M Sc. Projects :

- Evolution of Secured E-Commerce.
- Arabic Closed Caption.
- LAN Monitoring.

7- Managing Computer Systems Teams :

Developing Computer Systems (in the Egyptian Army – During 20 years service):

- Project 1 : Systems Transfer (Programs and data) from MVAX (DSM-11 database) into

Oracle working on Alpha server under UNIX (Dealing with Arabic Problems) in 1999.
Project 2 : Preparing documents to be copied into Microfilm media in 1999.
Project 3 : System Transfer from VSAM files into Data Base 2 Management System 1990.

8- System Analysis, Design and Implementation (Sharing with others):

- a- Army Master Data File (Catalog System).
- b- Foreign Military Sale System.
- c- Shipment Tracking System.
- d- Vehicles Usage Planning

9- Soft Skills:

Lecturing, Reporting, Speeches, TV Interviewing, Blogging, Heading National/International Teams (Developing and Conferencing).

10- Membership of Scientific Organizations:

- 1- The Egyptian Engineers Syndicate (Consultant Engineer).
- 2- The Egyptian Society of Software Engineers.
- 3- Upsilon Pi Epsilon (USA).
- 4- Order of The Engineer (USA).

11- International/National Awards:

- 1- Hesham was nominated to get "The King Faisal International Prize for Islamic Studies,"1993.
- 2- Hesham has been included in the 2006-2007 (9th.) Edition of **Who's Who in Science and Engineering**.
- 3- Hesham has been included in **the Outstanding Scientists of The 21st. Century**, Cambridge, UK, 2007.
- 4- Hesham was nominated to Cairo University Prize in Computer Science in 2007.
- 5- Hesham has been included in the 2009 (26th.) Edition of **Who's Who in The World**.
- 6- Hesham was awarded the prize of "**The Best Innovative Ideas to Develop Cairo Universities**" **in August 2009**.
- 7- Hesham was nominated to "**THE UNESCO KING HAMAD BIN ISA AL-KHALIFA PRIZE FOR THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN EDUCATION**"

12- Advising Professional Teams:

- 1- Super Power Team (Scientific Thinking Team of the FCI).
- 2- Summer Training of the Third Level of FCI.

References:

- 1- Prof. Hussein Khalid, The Vice President of Cairo University.
- 2- Prof. AbdAllah Eltattawy, The Ex-Vice President of Cairo University
- 3- Prof. P. Tobin Maginnis, University of Mississippi, CS department.
- 4- Prof. Reem M. Bahgat, Dean of the Faculty of Computers & Information, Cairo University.
- 5- Prof. Hoda M. Onsi, The vice Dean of the Faculty of Computers & Information, Cairo University.