هشام فاروق على محمد عبد الحافظ

أستاذ مشارك | قسم الحاسبات والنظم | معهد بحوث الالكترونيات

مدير الأبحاث والابتكار بالإنابة | معهد تكنولوجيا المعلومات | (ITI)

وزارة الاتصالات وتكنولوجيا المعلومات(MCIT)

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التعليم

جامعة القاهرة

الدكتوراه	1996 – 2001
الإلكترونيات و الاتصالات – كلية الهندسة	
الماجستير	1993 – 1996
الإلكترونيات و الاتصالات – كلية الهندسة	
البكالوريوس	1986 – 1991
الإلكترونيات و الاتصالات – كلية الهندسة	

شهادات أخرى

➢ Innovation Guide, IMP^{3}rove academy coaching program, EU	2013
➢ Intel Ideation camp coaching	2005
➢ Soft skills workshop	2006
➢ Management course , IESA Univ. Spain	2002 – 2003
➢ CCNA Certification	

المجالات البحثية

- ✓ eContent
- ✓ Image processing, Compression, Enhancement.
- ✓ Video processing, Compression, indexing, retrieval.
- ✓ Interactive Video on Demand.
- ✓ Pattern Recognition.
- ✓ Mobile technology and applications
- ✓ VR/AR/ MR
- ✓ IoT

الجوائز

➢ أفضل مقالة علمية لعام 2019 Cogent engineering Journal ,	2019
➢ الميدالية الذهبية فى محور السياجة بمعرض القاهرة تبتكر الخامس فى مشروع السياحة الافتراضية	2018
➢ جائزة التميز العلمى لعام 2018 ERI ,	2018
➢ جائزة التميز العلمى لعام 2017 ERI ,	2017
➢ جائزة الاتحاد العربى للمكتبات و المعلومات عن مشروع دار الوثائق	2009
جائزة أفضل رسالة دكتوراه فى جامعة حلوان لعام 2006	2006
➢ شهادة قائمة الشرف العلمية بالجامعة الأمريكية لأكثر من 12 ترم	1997:2002

الاستراتيجيات القومية

- وضع الرؤية و المهمة و الأهداف
- تحليل الوضع القائم
- وضع السياسات
- وضع خارطة الطريق و التوجهات
- استحداث المبادرات و المشروعات

Strategy 1: "INNOVATION IN MOBILE FOR DEVELOPMENT", Ministry of Scientific Research
Strategy 2: " KSA mobile strategy", KSA
Strategy 3: "ERI Strategy and Road map for 2030"
Strategy 4: "Human Capacity Building Scalability" Master Plan, MCIT
Strategy 5: "Egypt Government Cloud Computing", MCIT
Strategy 6: "Strategic Plan for eContent", MCIT
Strategy 7: "Mobile for Development", MCIT

الاستشارات (أمثلة)	o *ITU (International Telecommunication Union* o ***Ministries:*** *Education, tourism , Culture, Electricity, Information, Foreign Affairs, Agriculture, Luxor Governorate* o *General Authority for Educational Building* o *EL-Nasr Car manufacturing* o *Mobil Oil factory* o *Traffic control systems (el-Giza)* o *Traffic Control systems (Elsharkeyya)* o *Gaz distribution system*	2017-2019 2003-2013 1996 1998 2000 2011 **2012**

MCIT/TIEC/ITI

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1.	*Managing freelancing initiative*	2014-2015
2.	*Standardize ITI tracks according to SFIA*	2014-2015
3.	*National archive Digitization*	2008-2011
4.	*Mobile application task force vise president*	2013-2014
5.	*Microsoft Governmental agreement coordinator*	2006-2008
6.	*Building a map for the player of the technology clusters*	2005-2008
7.	*Helping in planning and establishing universal mobile lab.*	2013
8.	*Launching Egypt Innovate: Mobile Award*	2012
9.	*Building Cloud Computing Lab*	2012
10.	*Preparing for Cloud Computing Academy*	2013
11.	*Evaluation of ITAC-ITIDA proposals*	2010
12.	*Judging IBTICAR competition – TIEC-MCIT*	2012-2014
13.	*Referee in National eContent competition for couple of years*	2005, 2006
14.	*Launching Arabic eContent Initiative*	2005
15.	*Member in the committee for evaluating the final projects for the ministry of communications and information training system*	2002

ERI

1993-2019

1. *Technical Study preparation for Intranet for the Higher council for Research Centers and Institute*
2. *Technical study preparation for Robot track car controlled remotely*
3. *Technical study for replacing analog computer control system with digital computer control system*
4. *Technical consultation for Elsharkeya electronic traffic monitoring*
5. *Member in the committee for evaluating the proposals in an Egyptian competition in the field of IT technology, (Hardware, Software and informatics).*
6. *Sponsored by the Egyptian Society for PC's Technologies Workers.*
7. *Member in the many committees of describing technical specifications for many equipment and laboratory preparation*
8. *Member in many committees for evaluating the products, software and hardware*

ERI

مشروعات
بحثية
(أمثلة)

➢ Efficient Media Digital Library Design and Implementation of Summarized Video based on Scalable Video Coding for H.264 (MDLSS)	2016-2019
➢ "Virtour – New Paradigm for virtual tour" ASRT	1998-2000
➢ " A Low Cost Video and Image Compression Framework". Funded NSF	
➢ NILESAT receiver (video compression group) Funded ERI.	2007-2009
➢ Building Security algorithm using DSP and FPGA. Pattern recognition (Okrania).	

إشراف على
الرسائل

الدكتوراه

✓ "New Adaptive Technique for Human Body Motion Detection ad Face Recognition based on Wavelet Transform"

✓ "Interactive Video On Demand System over Long Range Ethernet"

✓ "Mines Detection and classification"

✓ "Video Streaming over Wireless Networks"

الماجستير.

✓ "Fusion Algorithm for Face Detection And Recognition"

✓ "New Video streaming techniaue over mobile networks"

✓ "A Novel Techniques for Media Asset Management performance Enhancement"

✓ "Segmentation for magnetic resonance images of the brain"

مشروعات
قومية

(أمثلة)

➢ **Arabic eContent Initiative**
Building a portal on the internet having more than 15000 **digitized** titles (www.fekr-rama.com**)** with Digital Rights management (DRM) and ePayment (VISA, Scratch Card, etc.), digitizing contents (books, software, movies, media, etc…)

➢ **News portal for Egyptian radio and TV union, ERTU** www.egynews.net.
Building a portal for online news service, with news library and online streaming, It was ranked No. 1 news portal in 2010-2011

➢ **National Archive of Egypt (NAE)**
➢ It was a digitization and archiving project for 90 million documents
Won "The prize of Arab Federation of Library and Information", 2009

➢ **Community and knowledge generation portal**
www.fekrzad.com , A portal serving the Community based on generating competitions between preparatory schools students.

➢ **Luxor governorate Portal www.luxorportal.com**

➢ **Sound and Light company portal www.soundandlight.com.eg**

➢ **Ministry of agriculture**
Building information system for the (Economic activity sector).

➢ **Ministry of Foreign Affaires: Study** for building a portal to connect Egyptian consulates with the ministry of Foreign Affairs.

- **Smart School network**

  Equipping 100 schools as a model for connecting Administration , teachers, Student and parent together with modern educational tools and portable classroom (UNDP)

- **Irrigation and drainage system**

  As a project manager for this project for a modular farm in Elsharkeyya - **Electrocard**

- **CAD/CAM system in KAFR EL-DAWWAR factory**

- **Expert system for plants disease sponsored by the USAID. (ERI)**

- **Data logging systems using programmable logic control (PLC) STIA**

التعاون الدولى

Conferences , workshops , seminars, training, Site visits in:
UK, USA, France, Italy, Spain, Greece, Turkey, South Korea, United Arab of Emirates, Sudan, Netherland and China

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خبرات تدريسية

أمثلة

Teaching Experience

in the field of signal processing, computer systems and networking in many universities, academies as AUC, FUC, El-Obour academy, Elmadina academy, 6 of October university

And others:

Ministry of Finance ,Ministry of Education, Ministry of Local Development, Middle East Advisory Group, IDSC EGYfIT, TRI –TECH, TeleWeb

1. System Design, Basic Internet Services.
2. HTML. , DHTML, ASP
3. Web technologies, Computer internetworking.
4. Corporate Intranet.
5. LAN & WAN concepts and CCNA, TCP/IP protocol
6. Windows server administration
7. Telecommunication and networking.
8. Macromedia FLASH, Multimedia applications, Computer graphics
9. Computer Peripherals, Operating Systems, IBM PC maintenance
10. Database programming

النشر العلمى
(Examples)

Book chapter: Mobile Government in Egypt:
Opportunities and Challenges
in the book: E-Government Implementation and Practice in Developing Countries (2013)

Scientific papers

1. H. Farouk, S. Mashali, M. Rashwan, A. Nassar, "A New Fast Adaptive Compression Technique For Color Image Compression", Application of digital Image Processing XIX, SPIE, 28 July to 2 Augest 1996.

2. H. Farouk, S. Mashali, M. Rashwan, A. Nassar, "New fast adaptive matching criterion for block-based motion compensation", Application of Digital Image Processing XXIII, SPIE, 30 July to 4 Aug 2000.

3. H. Farouk, S. Mashali, M. Rashwan, A. Nassar, "Fast Memorized Search Technique for Block-Based Motion Estimation", Applications of Digital Image Processing XXIV, SPIE, 29 July to 3 Aug 2001.

4. H. Farouk, S. Mashali, M. Rashwan, A. Nassar, "Video Compression Improvements Based On Camera Motion" , IEEE ISSPIT Dec. 28-30, 2001.

5. H. Farouk. H. El_Salamouny, A. Darweesh, "3D Human Body Motion Detection and Tracking in Video", The 14th. International Conference on Applied Simulation and Modeling. ,June pp. 120-125, Benalamadena, Spain. , June 15-17, 2005

6. H. Farouk, Darweesh,. Ali, Hany M. El-Salamony, "Automatic Face Detection and Matching in Video and Static Images using Wavelets Decomposition", Egyptian Computer Science Journal, Vol. 27, No. 3, July 2005.

7. H. Farouk, S. Mashali, M. Rashwan, "Efficient Compression Technique for Panorama Camera Motion", WSEAS, Turkey, June, 2006.

8. H. Farouk, R. Mohamed, "A Comparative Study for Open Document Formats ", 2nd International Conference on Universal digital Library, .ICUDEL., pp. 195-201, Alexandria, Egypt, 17-19 November, 2006.

9. H. Farouk, A. Yehia, "Steps Towards The Arabian Digital Information Society", Second Arabic Meeting for Information and Libraries, Dec, 2007

10. H. Farouk, "Adaptive I frame Positioning For MPEG Bit Rate Improvement", 11th WSEAS CSCC. Agios Nikolaos, Crete Island, Greece, July 26-28, 2007.

11. H. Farouk, "MPEG Bit Rate Improvement Using Adaptive GOP,"International Journal of Circuits, Systems and Signal Processing, pp 8- 11, Issue 1, Vol. 1, 2007.

12. H. M. Khalil, H. Farouk, D.A Said, "An Efficient automated Detection and matching technique for Landmines in IR images",Journal of Alazhar University Engineering Sector, JAUES, April 2008.

13. H. Farouk, E. Elshimy, S. Ahmed, I. Ismail, "Interacitve Video On Denamd System With Self-detection And Recovering From Fauilures: Design And Implementation", Journal of Alazhar University Engineering Sector, JAUES, April 2008.

14. H. Farouk, E. Elshimy, S. Ahmed, I. Ismail, "A Novel Approach for Resources Self-Detection and Recovering from Failures in Video-on- Demand systems", Egyptian Informatics Journal, Issue 1,2, Vol. 9, pp. 395-405, December 2008.

15. H. Farouk etal, "A DESIGN FOR AN FPGA IMPLEMENTATION OF RIJNDAEL CIPHER", Journal of Programmable Devices, Circuits, and Systems, International Congress for Global Science and Technology (ICGST), 2009.

16. H. Farouk, A. H. Salamouny, "Digital Library Creation Based On Wavelet Coefficients for Video Stream Indexing and Retrieving", 2nd International Conference on Signal Processing Systems (ICSPS), V1, pp. 158-162, Dalian China, 5-7 July, 2010

17. H. Farouk, A. Tobal, "An Efficient Detection and Classification Method for Landmine Types Based on IR Images Using Neural Network", International Journal of Geology, pp. 91-95, Issue 1, Volume 4, 2010.

18. H. Farouk, etal, "High Precision Face Detection and Recognition based on Fusion of Discernment Techniques", ICGST International Journal on Graphics, Vision and Image Processing , GVIP, Issue 2, Vol. 11, pp. 31- 39, April 2011

19. H. Farouk, B. Amin, A. Mostafa, ''A Novel Design for Smart App Firewall Framework'' ,Complexity, Informatics and Cybernetics: IMCIC 2014, Orlando, Florida, USA, March 4 - 7, 2014.

20. H. Farouk, M. Elnwawy, B. Amin, "Innovation Management Benchmarking for ICT Firms in Egypt", IAMOT 2014, Washington DC, USA, 22-26 May, 2014.

21. Hafez Fouad, Hesham Farouk, "Design And Implementation Of Video Conferencing Cloud-Based Network Using VOIP For Remote Health Monitoring In Telemedicine System", "International Journal of Computer Informatics & Technological Engineering" (IJCITE), VOL 1, ISSUE 1, MARCH- APRIL, 2014.

22. H. Farouk, K. ElDahshan, and A. Abozeid, The State of the Art of VideoSummarization for Mobile Devices: Review Article, Graphics, Vision and Image Processing GVIP, volume(14), issue(2), pages. 37-50, 2014.

23. H. Farouk, K. A. ElDahshan, and A. Abozeid, "The State of the Art of Video Summarization for Mobile Devices: Review Article", Graphics, Vision and Image Processing GVIP, volume (14), issue (2), pages. 37-50, 2014.

24. Hafez Fouad, Hesham Farouk, "Design and Implementation of Wireless Sensors Network and Cloud Based Telemedicine System for Rural Clinics and Health Centers", International Journal of Scientific & Engineering Research (IJSER), Volume 6, Issue 2, February 2015.

25. H. Farouk, K. A. ElDahshan, and A. Abozeid, "Video Summarization for Mobile devices based on Visual Saliency Detection", Advances in Computer Related Research Work, Mar 23, 2015.

26. H. Farouk et al, "Efficient Media Digital Library Design and Implementation of Summarized Video based on Scalable Video Coding for H.264 (MDLSS)", The Seventh International Conference on Advances in Databases, Knowledge, and Data Applications, DBKDA, 2015, Rome, Italy, May 24 - 29.

27. Hesham Farouk, Kamal A. ElDahshan, Amr Abozeid, "Effective and Efficient Video Summarization Approach for Mobile Devices", International Journal of Interactive Mobile Technologies. IJIM, ISSN: 1865-7923, Vol 10, No 1, 2016

28. Ibrahim E. Ziedan, Shimaa Mohamed, Hesham Farouk, "Comparative Study on Human Identification using Ear Biometrics", International Journal of Computer Science and Information Security (IJCSIS), Vol. 14, No. 11, November 2016.

29. Amr Abo Zaid, Hesham Farouk, Kamal Eldahshan, "Scalable Video Summarization based on Visual Attention Model", CONTENT2018, The Tenth International Conference on Creative Content Technologies, Barcelona, Spain, February, 2018

30. Mohamed Kamel, Hesham Farouk and Samia Mashali, "A Novel approach for Fairness Video Streaming and Processing in Multi-Users Systems", International Journal of Electrical systems and Information Technology, JESIT, ISSN:2314-7172, July, 2019, Accepted