Hesham Farouk Ali

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Career Objective

Seeking a challenging position in a warehouse where my stock-picking skills can be put to good use in Research, strategic management, Planning, business development.

Education

Cairo University, Egypt

Ph.D.		1996 – 2001
Electronics & Communication Dept. Faculty of Engineering.		
M.Sc.		1993 – 1996
Electronics & Communication Dept. Faculty of Engineering.		
B.Sc.		1986 – 1991
Electronics & Communication Dept. Faculty of Engineering.		

Certificates

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

Research Interest

- eContent
- Signal processing.
- Image processing, Compression, Enhancement.
- Video processing, Compression, indexing, retrieval.
- Interactive Video on Demand.
- Pattern Recognition.
- Mobile technology

Awards

The prize of Arab Federation of Library and Information	2009
for the best project of the year. **Dar Elwathaek project**	
The Best Ph.D. thesis	2006
Helwan Univ., Cairo, Egypt. (under my supervision)	
Honor certificates for teaching and project supervision	1997-2002
From AUC.,for more than 12 terms	

National Strategy	Main duties: Putting the targets, Analyzing the current situation, Setting the policy, setting the road map f the directions, Inititives and programs drivien from the strategy goals

> *Developing KSA mobile strategy2014*

> *Member in the committees in preparing the national strategy document for the following:*

- *MCIT: Human CapacityBuilding Scalablility Master Plan*
- *MCIT: Egypt Governemnt Cloud Computing*
- *MCIT: Strategic Plan for eContent*
- *MCIT: Strategy on "Mobile for Development"*
- *Ministry of Scientific Research: INNOVATION IN MOBILE FOR DEVELOPMENT*

Consultations *(examples)*

• *EL-Nasr Car manufactoring*		1996
• *Mobile Oil factory*		1998
• *Traffic control systems (el-Giza)*		2000
• *Traffic Control systems (Elsharkeyya)*		2011
• *Gaz distribution system*		2012

Appointments

Current and previous jobs I occupied

ERI

Main duties: Research and innovations, Consultations, Cooperation with the universities, Training and workshop mastering, Technology transfer activities, Thesis supervisions, research and practical projects development and implementation

1. *Associate Professor, ERI, Ministry of scientific research*		2011- now
2. *Researcher, ERI, Ministry of scientific research.*		2001 -2011
3. *Assistant Researcher, ERI, Ministry of scientific research.*		1996-2001
4. *Research Assistant, ERI, Ministry of scientific research.*		1993-1996
5. *Head of Technical office, ERI president*		2012-now
6. *Head of technology Transfer office*		2013-now

MCIT/TIEC/ITI

Main duties: Strategies and master plans development, Consultations, Cooperation with other ministries, Training and workshop mastering, Project planning and management, system analysis, protocols formulation, International agreement management.

1. *Technology Consultant (ITI)*		2014
2. *Tehcnology Manager Technology Innovation and Entrepreneurship Center (TIEC)*		2013--2014
3. *Acting manager MSCC, Technology Innovation and Entrepreneurship Center (TIEC)*		2012- 2013
4. *eContent department manager*		2008-2012
5. *IT projects manager, MCIT*		2002–2008

AUC

Main duties: Consultations, Curriculum development, teaching, system administration, projects supervision

1.	*Instructor at AUC-CACE-CSD, BSD.*	1998-2008
2.	*Network Administrator AUC-CACE-CSD.*	1996-1999
3.	*Technical Advisor AUC-CACE-CSD.*	1999-2002

Others

1.	*Manager of training center in El-Safwa Co.*	1995-1996
2.	*Head of the Sales & Hardware Department, El-Safwa Co.*	1996-1998
3.	*R&D engineer in "WISSAM for designing and manufacturing electronic systems".*	1992-1995

Professional Activities
(Examples)

Example of the main activities and achievement in a globe

MCIT/TIEC/ITI

1.	*Managing freelancing initiative*	2014-2015
2.	*Standardize ITI tracks according to SFIA*	2014-2015
3.	*Managing freelancing initiative*	2014-2015
4.	*Mobile application task force vise president*	2013-2014
5.	*Microsoft Governmental agreement coordinator*	2005-2008
6.	*Building a map for the player of the technology clusters*	2013
7.	*Helping in planning and establishing universal mobile lab.*	
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
13.	*Referee in National eContent competition for 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 done by IBM.*	2002

ERI

16.	*Technical Study preparation for Intranet for the Higher council for Research Centers and Institute*	2002
17.	*Technical study preparation for Robot track car controlled remotely*	2002
18.	*Technical study for replacing analog computer control system with digital computer control system*	2002
19.	*Technical consultation for Elsharkeya electronic traffic monitoring*	
20.	*Member in the committee for evaluating the proposals in an Egyptian competition in the field of IT technology, (Hardware, Software and informatics).*	
21.	*Sponsored by the Egyptian Society for PC's Technologies Workers.*	2001

22. Member in the many committees of describing technical specifications for many equipment and laboratory preparation	1995-2010
23. Member in many committees for evaluating the products, software and hardware.	1995-2002

Research Projects
(Examples)

ERI

NSF funded project entitled " A Low Cost Video and Image Compression Framework" .	2002–2004
NILESAT receiver (video compression group).	1998-2000
Building Security algorithm using DSP and FPGA.	2004-2005
Pattern recognition (Okrania).	2007-2009

Thesis Supervision

Ph.D.

- *"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"*

M.Sc.

- *"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"*

Project Management
(Examples)

MCIT

- **Arabic eContent Initiative**

Building a portal on the internet having more than 15000 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

- **National Archive of Egypt (NAE)**
- **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 consulate with the ministry of Foreign Affairs.

Irrigation and drainage system
As a project manager for this project for a modular farm in Elsharkeyya - **Electrocard**

Projects Membership
(Examples)

Main duties: Analyzing the system, Determine client requirements, Online status report, time plan setting, selecting the team members, assigning tasks, designing reports format, RFP preparation, following up …. Etc.

MCIT
- Smart School network
- FekrZad portal
- Microsoft agreement management

ERI

JPEG2000 compression – NSF	2003-2005
CAD/CAM system in KAFR EL-DAWWAR factory	1997-1998
Expert system for plants disease sponsored by the USAID. (ERI,)	1993-1994
Data logging systems using programmable logic control (PLC) STIA	1993-1994

Wissam Co.
for designing and manufacturing electronic systems   1992-1995

- Data logging system (in AMICO tenth of RAMADAN factory).
- Parking control system (in El-Gezira sports club).
- Production line control in steel factory (INCOSTEEL factory).
- Moving messages.
- Currency displays.
- Elevator displays.
- Queuing system.

Teaching Experience
(Examples)

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
2. Basic Internet Services.
3. HTML. , DHTML, ASP
4. Web technologies
5. Computer internetworking.
6. Corporate Intranet.
7. LAN & WAN concepts.
8. TCP/IP protocol
9. Windows server administration
10. Telecommunication and networking.
11. Macromedia FLASH.
12. Multimedia applications
13. Computer graphics

14. Computer Peripherals
15. Operating Systems
16. IBM PC maintenance
17. CCNA
18. Database programming

Seminars
(Examples)

Example for Seminars , conferences or workshops as presenter

1. *Mobile applications ecosystem*	2014
2. *Mobile technology trends*	2012
3. *Portal Site Design & Implementation AUC*	2000
4. *Arabic eContent Initiative, Central Library, Cairo University.*	2009
5. *Arabic eContent Initiative, Cairo International book fair.*	2008
6. *Software Maintenance AUC*	1999
7. *HTML design tools ERI*	1999
8. *IBM PC Troubleshooting AUC*	1997

International cooperation

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

Equipments, Devices, Systems

Example of equipments, devices and system I am working with in different projects

1. *Microcontroller based kits (Texas & Zilog Evaluation kit).*
2. *Allen Bradley PLC systems.*
3. *Allen Bradley scanner on the IBM PC (6008 SI).*
4. *Laboratory Equipments (Logic analyzer, Oscilloscope, Function Generator, Frequency counter, the IBM PC cards such as "EPROM Programmer, Emulators, Logic analyzer, data Acquisition Systems, Sound systems, Video systems).*

Publications
(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 Video

Summarization 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.

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