

Curriculum Vitae

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Objective

To work with a reputed institution as an Assistant professor, that will provide me a good platform to utilize my teaching & administration skills and will help me to grow my career.

Academic Education

Helwan University – Cairo, Egypt.
Doctor Degree in Communication Engineering

Graduated: 01/2012.
Title: Trust-Based Routing for Infix-Infrastructure Networks.

Helwan University – Cairo, Egypt.
Master Degree in Communication Engineering

Graduated: 11/2006.
Title: Dynamic Route Optimization for Multicast Communications in Internet Protocol Networks

Helwan University – Cairo, Egypt.
Bachelor of Engineering in Communication and Electronic Engineering

Graduated: 05/2001.
Degree: Excellent with honor, the first.

Professional Qualifications

- Possess about fifteen years' experience in the field of education (both teaching and training).
- Thorough understanding of the subject with ability to convey the same to the students.
- Good communication and comprehension abilities.
- Possess knowledge about the internal administrative tasks that are performed within institutions.

Academic and non-academic Positions

Demonstrator	Faculty of Engineering - Helwan University, Cairo, Egypt 01/01/2002—03/02/2007
Teacher Assistance	Faculty of Engineering - Helwan University, Cairo, Egypt 04/02/2007— 23/04/2012
Assistant Professor	Faculty of Engineering - Helwan University, Cairo, Egypt 24/04/2012— Until now

Research Interests

My research activities are focused on advanced network and data link layer protocols of both wired and wireless networks. I am most interested in Radio Access Networks for legacy and beyond 4G systems, Cognitive radio networking, Device to Device Communication, Software Defined Network, Network Security and Cryptography Applications, and media authentication.

Educational Activities

As an Assistant Professor at Faculty of Engineering - Helwan University, part timer at Faculty of Engineering - Misr International University & part timer at Faculty of Engineering – French University on Egypt, i have been working for 17 years as an instructor and taught the following courses:

1. **Probability, random variabls and random process.**
2. **Electronic measurement.**
3. **Introduction to communications.**
4. **Signal analysis.**
5. **Telecommunication fundamentals.**

6. **Communication theory and systems.**
7. **Analog Communication.**
8. **Digital communication.**
9. **Telephone engineering.**
10. **Cellular (Mobile) Communication systems.**
11. **Fiber Optics.**
12. **Optical communications.**
13. **Wireless network.**
14. **Computer network.**
15. **Cryptography and Network security.**
16. **Digital Signal Processing.**
17. **Information Theory and Coding.**

Graduation projects:-

- 1- **Project Name:** Digital Communication Light Modem (D-light)
Academic year: 2012/2013

- 2- **Project Name:** Smart Electronic Health System
Academic year: 2015/2016

Funded Graduation projects:-

- 1- **Project Name:** Mobile Application for Deaf and Dumb (MADD)
Academic year: 2013/2014
Funded by: Information Technology Industry Development Agency (ITIDA)
Made In Egypt (MIE9) competition finalist project
<http://www.miecompetition.org/news/august-2014/mie9-finalists-announcement/>
<http://www.miecompetition.org/competitions/mie-9/projects/mobile-app-for-deaf-and-dumb-madd/>

- 2- **Project Name:** ESC – Escape Silence & Connect
Academic year: 2013/2014
TIEC Graduation Project Competition IBTIECAR 2014

University Technical Activities

1. Participating in preparing the new syllabus for B.Sc, M.Sc, and Ph.D levels in the department of Electronics, Communications, and Computers Engineering, Faculty of Engineering, Helwan University.
2. Member in the department committee for Quality Assurance. Which specializes in, reviewing courses specifications and reports for both undergraduate and postgraduate programs, and preparation of Communication and Electronic Engineering programs specifications and reports for both undergraduate and postgraduate, from 2010 to 2014.
3. Participating in preparing and developing the administrative structure of the Faculty of Engineering - Helwan University, and the origination of some new departments such as the crisis and disaster management department, the graduates continuation department, and industry connection department. Preparation of targets, terms of reference and the formation of these new department, and preparation of a set of crisis management scenarios, from 2010 to 2014.

Funded Research Projects

- 1) **Team Member in development project funded from the Ministry of Higher Education (MoHE) in Egypt**
 - **Project Title:** Center of Excellence for Smart Educational Systems – CESES
 - **Academic Partners:** Department of Electronics, Communications and Computers Engineering, Faculty of Engineering, Helwan University.
 - **Project Duration:** Two years project (Start date: 01/06/2014, End date: 31/05/2016)
 - **Total Fund:** 3.8MEGP
- 2) **Team member in Erasmus+ project funded by the European commission for developing a new master program in smart grid technology.**
 - **Project Title:** Smart Grid Technology - A Master Programme / SGT-MAP.
 - **Academic Partner:** *University of Strathclyde - UOS (UK), University of Aberdeen - UNIABDN (UK), Alpen-Adria Universität Klagenfurt - UNI-KLU (Austria), Universidad de Sevilla - US (Spain), Helwan University - HU (Egypt), Arab Academy for Science, Technology, and Maritime Transport - AASTMT (Egypt), Alexandria University - AU (Egypt), ASWAN University - ASWU (Egypt).*
 - **Associated Partners:** Egyptian Ministry of Electricity and Renewable Energy, Misr El khier organization in Egypt

- **Project Duration:** Three years project (Start date: 15/10/2016, End date: 14/10/2019)
- **Total Fund:** 625,665Euro

3) Team member in applied research project funded by the National Telecommunication Regulatory Authority (NTRA), Ministry of Communications, Egypt.

- **Project Title:** Integrating 3G/4G and Wi-Fi Architectures for Diverse Offloading Capabilities.
- **Academic Partners:** Helwan University, Faculty of Engineering, Department of Electronics, Communications and Computers Engineering.
- **Industrial Partner:** Etisalat Misr Mobile Operator.
- **Project Duration:** Two years project (Start date: 01/11/2017, End date: 30/10/2019)
- **Total Fund:** 2.29MEGP

Consultation and training activities

Consulting Experience

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|--|-----------------------------|
| 1. Design the internal telephone network of the Faculty of Fine Arts, Helwan University, and the preparation of the bid requirements and the technical specifications. | 03/2013 |
| 2. Consultant and supervisor of the work of connecting the telephone network of the Open Education Building at the University of Helwan to the University local telephone exchange. | 05/2013
to
07/2013 |
| 3. Consultant and supervisor of the implementation of the internal telephone network to the College of Fine Arts, Helwan University. | 01/2014
to
07/2014 |
| 4. Consultant and supervisor of the replacement of old PBX with a electronic one and the maintenance of the internal telephone network in College of Engineering, Helwan University. | 10/2014 |
| 5. Co. PI for Strategic Plan project funded by Helwan University, Egypt. | |
| Title: The rehabilitation and upgrading of the Electronics Laboratory infrastructure at the Department of Electronics, Communications and Computer Engineering. | 1/7/2017
To
1/12/2019 |
| Total Fund: 3.2MEGP | |
| 6. Co. PI for Strategic Plan project funded by Helwan University, Egypt. | |
| Title: The rehabilitation and upgrading of some classrooms at | 1/7/2019
To
1/7/2021 |

Faculty of Engineering – Helwan University.

Total Fund: 3.9MEGP

Tanning Activities

1. Computer networks and its applications, Jelecom A.D. Panasonic company, Cairo, Egypt. 2003, 2004 and 2005
2. Training the communication Technicians of Mellitah Oil & Gas B. V. Libyan Branch Company, on communications technology and switches (Casablanca, Morocco). 01/2014

Other Qualifications

1. Successfully passed “Scientific Research Workshop,” Helwan University.
2. Successfully passed “International Publishing of Research Workshop,” Helwan University.
3. Successfully passed “Research Team Management Workshop,” Helwan University.
4. Successfully passed “University Administration Workshop,” Helwan University.
5. Successfully passed “Credit Hour System Workshop,” Helwan University.
6. Successfully passed “Student Evaluation Workshop,” Helwan University.
7. Successfully passed “Conference Organization Workshop,” Helwan University.
8. Successfully passed International Computer Driving License (ICDL) exams at Helwan University Computer Centre.

Computer programming & Knowledge

- C programming.
- Visual Basic programming.
- Familiar with Matlab
- Familiar with Multisim
- Familiar with Internet

Languages (😊):

Language	Writing	Speaking	Understanding
Arabic	Mother Tongue	Mother Tongue	Mother Tongue
English	Very Good	Very Good	Very Good

Publication

1. I. Ibrahim, A. S. Ali and A. M. Abd El-Haleem, "Online QoS Multicast Routing Algorithm with minimum interference ", Ain Shams scientific Bulletin, Vol. 41, No. 1, March 31, 2006, PP.691-706.
2. I. Ibrahim, A. S. Ali and A. M. Abd El-Haleem, "Performance Evaluation of Online QoS Multicast Routing Algorithm With Minimum Interference", ICCTA 2006, 5-7 September 2006, Alexandria, Egypt, pp.69 – 76.
3. I. Ibrahim, A. S. Ali and A. M. Abd El-Haleem, "Source specific QoS Based Multicast Routing for IP Networks", ICCTA 2007, 1-3 September 2007, Alexandria, Egypt, pp. 152 - 160.
4. Ahmed M. Abd El-Haleem, Ihab A. Ali, Ibrahim I. Ibrahim, and Abdel Rahman H. El-Sawy "Trust Model for TRIDNT Trust Based Routing Protocol" 2nd International Conference on Computer Technology and Development (ICCTD) 2010, 2-4 Nov. 2010 Cairo, Egypt, PP. 538 – 544, @ IEEE 2010. [Online] Available: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5645954
5. Ahmed M. Abd El-Haleem, Ihab A. Ali, Ibrahim I. Ibrahim, and Abdel Rahman H. El-Sawy "TRIDNT: Isolating Dropper nodes with some degree of Selfishness in MANET" The First International Conference on Computer Science and Information Technology January 2 ~ 4, 2011. Bangalore, India. CCSIT 2011, Part I, CCIS Volume 131, pp. 236–247, 2011. © Springer-Verlag Berlin Heidelberg 2011. [Online] Available: <http://www.springerlink.com/content/v46830531212j154/>.
6. Ahmed M. Abd El-Haleem, Ihab A. Ali," TRIDNT the Trust-Based routing protocol with controlled degree of node selfishness in MANET", International Journal of Network Security & Its Applications (IJNSA), Vol.3, No.3, May 2011, pp. 189-204.
7. Ahmed M. Abd El-Haleem, Ihab A. Ali," TRIUMF: Trust-Based Routing Protocol with controlled degree of Selfishness for Securing MANET against Packet Dropping Attack", IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 4, July 2011, pp. 99-110.
8. Ahmed M. Abd El-Haleem, Ihab A. Ali, and Ibrahim I. Ibrahim, " Analytical Model and Performance Evaluation for the TRIDNT protocol", IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 4, July 2011, pp. 77-98.
9. Ahmed M. Abd El-Haleem, Ihab A. Ali, and Ibrahim I. Ibrahim, " AOMDV Based TRIUMF implementation and performance evaluation", IJCIS International Journal of Computer Information Systems, Vol. 3, No. 2, 2011, pp. 60-69 .
10. Shereen Omar, Osama El Ghandour, Ahmed M Abd El-Haleem "Multipath Activity Based Routing Protocol for Mobile Cognitive Radio Ad Hoc Networks" Wireless Communications and Mobile Computing journal, Vol. 2017, 15 Jan. 2017.
11. Shereen Omar, Osama El Ghandour, Ahmed M Abd El-Haleem "MACNRP Implementation Based AOMDV and Performance Evaluation", International Journal of Networks and Communications, Vol. 7(1), March 2017, PP. 17-23

12. Noha A. Elmosilhy, Ahmed M. Abd El-Haleem, and Mahmoud M. Elmesalawy, "Optimal Placement of Heterogeneous Wireless Nodes in LTE/WiFi Integrated Networks," The 2nd Europe – Middle East – North African Regional Conference of the International Telecommunications Society: "Leveraging Technologies For Growth", February 18-21, 2019, Aswan, Egypt.

URL: <http://hdl.handle.net/10419/201747>

13. Eman Abd El-Naby, Ihab A. Ali, Ahmed M. Abd El-Haleem and Hesham F. A. Hamed, "Soft Sectored Fractional Frequency Reuse in LTE-Advanced Networks" 18th International Conference on AEROSPACE SCIENCES & AVIATION TECHNOLOGY, ASAT - 18 – April 9 - 11, 2019

URL: <https://iopscience.iop.org/article/10.1088/1757-899X/610/1/012032>

14. A. I. Abdulshakoor, M. M. Elmesalawy, N. A. Elmosilhy and A. M. A. El-Haleem, "Joint Network and Mode Selection in 5G Multi RAT Heterogeneous Networks," 2019 42nd International Conference on Telecommunications and Signal Processing (TSP), Budapest, Hungary, 2019, pp. 307-312. doi: 10.1109/TSP.2019.8769059

URL: <https://ieeexplore.ieee.org/document/8769059>

15. Mohamed Anany, Mahmoud M. Elmesalawy and Ahmed M. Abd El-Haleem, "Matching Game-Based Cell Association in Multi-RAT HetNet Considering Device Requirements," in *IEEE Internet of Things Journal*, vol. 6, no. 6, pp. 9774-9782, Dec. 2019. doi: 10.1109/JIOT.2019.2931448

URL: <https://ieeexplore.ieee.org/document/8777175>

16. Noha A. Elmosilhy, Ahmed M. Abd El-Haleem, and Mahmoud M. Elmesalawy, "Optimal Deployment of Heterogeneous Wireless Nodes in Integrated LTE/Wi-Fi Networks," 2019 IEEE 10th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON), Columbia University, New York, USA, 10-12 Oct. 2019, pp. 1050-1056.

17. N. A. Elmosilhy, M. M. Elmesalawy and A. M. Abd Elhaleem, "User Association With Mode Selection in LWA-Based Multi-RAT HetNet," in *IEEE Access*, vol. 7, pp. 158623-158633, 2019. doi: 10.1109/ACCESS.2019.2949035

URL: <https://ieeexplore.ieee.org/abstract/document/8880588>

18. A. M. Alagrami, Mahmoud M. Elmesalawy, and Ahmed M. Abd El-Haleem "Enhanced ANDSF WiFi Discovery Mechanism Using Machine Learning for Mobile Data Offloading" 2019-15th International Computer Engineering Conference (ICENCO), 29-30 Dec. 2019, Cairo, Egypt.

Google scholar account: http://scholar.google.com/eg/citations?user=krQd_F8AAAAJ&hl=en

Academia account: <https://helwanuniversity.academia.edu/DrAhmedAbdElhaleem>

ResearchGate account:

https://www.researchgate.net/profile/Ahmed_Abd_el_haleem2?ev=hdr_xprf&_sg=GYu02kxo6ha3Zz1yohRWGWPGBpwpEHJthXDIIIF1tr15seGVdM2WL09dprEyN685r

References

1. **Prof. Abdel Rahman H. El-Sawy**, Electronics, Communications, and Computers Engineering Department, Faculty of Engineering, Helwan University, Egypt.
Email: aelsawy@seegypt.com
2. **Prof. Ihab AbdelWahab Ali**, Electronics, Communications, and Computers Engineering Department, Faculty of Engineering, Helwan University, Egypt.
Email: ihabaly@gmail.com
3. Prof. Ahmed Elgarhy, Electronics, Communications, and Computers Engineering Department, Faculty of Engineering, Helwan University, Egypt.
The current Department Head
Email: agarhy2003@yahoo.com
4. **Assoc. Prof. Ahmed Salah El_Din Mohamed Ali**, Electronics, Communications, and Computers Engineering Department, Faculty of Engineering, Helwan University, Egypt.
Email: d.ahmedsalah@gmail.com

Personal Data

Date of Birth: February 24th, 1979

Place of Birth: Giza, Egypt

Military Status: Completed.

Marital Status: Married.

