

ASHRAF ABDELAZIZ TAHA ABDELAZIZ

Contact :

City of Scientific Research and Technological Applications
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Researcher in the Department of Networks and Distributed Systems

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Personal Information:

Date of Birth : 29/12/1968

Gender : Male

Marital Status : Married

Nationality : Egyptian

Military Service : Finish

Current Job : Researcher, City of scientific research and technology applications, Informatic Research Institute, Department of Computer Networks, Alexandria, Borg El-Arab, Egypt

Major Interest : Computer Networking

Minor Interest : Video streaming over Network.

Research Interests : Networking, Security, IoT, and Video streaming.

Education:

1 Mar. 2012 - 31 Aug. 2012	Speed School of Engineering, Louisville University, Kentucky, USA <ul style="list-style-type: none">• Postdoctoral in Computer Engineering and Computer Science (STDF Visiting Grants)
2003-2009	Faculty of Engineering, Alexandria University, Alexandria, Egypt. <ul style="list-style-type: none">• Ph.D. in Electrical Engineering.• Thesis Title: "Adaptive QoS Management for Video Streaming Delivery over the Internet"
1995-2000	Faculty of Electronic Engineering, Menoufia University, Menoufia, Egypt. <ul style="list-style-type: none">• M.Sc in Computer Science and Engineering• Thesis Title: "Design, Realization, and Performance Evaluation of Multimedia ATM Switching Network".
1985-1990	Faculty of Electronic Engineering, Menoufia University, Menoufia, Egypt. <ul style="list-style-type: none">• B.Sc in Industrial Electronics Very Good• Project title : " Parallel Processing" Very Good

Research & Teaching Experiences:

Aug. 2013 - Aug. 2019	Assistant Professor King Saud University, College of Computer & Information Sciences, Department of Computer Engineering. <u>Courses Taught</u> CEN 214- Logic Design 1 CEN 303- Data Communications & Computer Networks CEN 444- Computer Networks CEN 445- Network Protocols & Algorithms CEN 447- Networking CCNA Lab CEN 449- Broadband and high-speed Networks CEN 448- Security & Internet Protocols CEN 492 & 493- Undergraduate Projects
Aug. 2013 - Dec 2013	Assistant Professor King Saud University, College of Engineering, Department of Electrical Engineering. <u>Courses Taught</u> CE330 - Introduction to Electronics
July 2010 – Now	Researcher City of scientific research and technology applications Alexandria, Egypt Informatics Research Institute
Feb 2013 - May 2013	Farous University <i>Doctor in the Electrical Engineering Department</i> <u>Courses Taught</u> Introduction to Electronics
Sep 2012 - Jan 2013	University of 6th October, Faculty of Engineering <i>Doctor in the Computer Science Department</i> <u>Courses Taught</u> 1. Computer Graphics 2. Image Processing 3. Machine Learning
Jul. 2009 - Nov. 2009	EC-Council University Lecturer in the University for Master of Security Science Courses <u>Courses Taught</u> Securing Wireless Networks
2000 - 2009 1994 – 1999	City of scientific research and technology applications, Alexandria, Egypt Assistant Researcher Researcher Assistant <u>Courses Taught</u> Computer Maintenance Internet ICDL courses Network Fundamentals Quality of Service Video Streaming Delivery over the Internet
Oct.1992 - Feb. 1994	Military Service: Air Defense College, Alexandria, Egypt Lecturer in Air Defense College
Oct.1990 - Oct.1992	Sakhr Computer Center, Alexandria, Egypt • Technical Support (Hardware & Software management) + Training. • Principle investigator in the computer maintenance department.

Professional Experience:

University of 6th October, Faculty of Engineering

- I supervised the students in the computer science department to introduce an advanced method to transform static pictures into moving ones.

<http://www.o6u.edu.eg/NewsDetails.aspx?FactId=1&News=345>

City of scientific research and technology applications, Alexandria, Egypt

- An executive job for Fujitsu Company as the work of exchanging the main structure of the Internet by the wireless network with security solutions and applying VOIP application to the network for SRTA-City.
- I participated as an executive in the work of design, realization, and performance evaluation for the main structure of the Internet for the city for scientific research and technological applications.
- Principle investigator in the computer maintenance department.

Publications :

1. "Design, Realization, and Performance Evaluation of a Multimedia ATM Switching Network", 9th International Conference on Computer Theory and Applications ICCTA'99, Organized by Computer Society & IEEE Alexandria Chapter, Sponsored by Arab Academy for Science and Technology and Maritime Transport - 27-30 August 1999 Sheraton Hotel Alexandria-Egypt.
2. "Adaptive QoS Management for video streaming delivery over the Internet – UDP Protocol", 7th WSEAS International Conference on Telecommunications and Informatics, TELE-INFO'08, Istanbul, Turkey, May 27-30, 2008.
3. "Adaptive QoS Management for video streaming delivery over the Internet – UDP Protocol", 7th WSEAS International Conference on Recent Advances in Systems Engineering and Applied Mathematics, Selected Papers from the WSEAS Conferences in Istanbul, Turkey, May 27-30, 2008.
4. "Effect of TCP and UDP parameters on the quality of video streaming delivery over the Internet", WSEAS TRANSACTIONS on COMM., Issue 1, Vol. 7, ISSN: 1109-2742, January 2008.
5. "Studying the Effect of Changes in Video Streaming Parameters to Enhance MPEG Performance Quality", The 7th International Conference on Technology and Sustainable Development in the Third Millennium, 14-16 December 2013
6. "A Channel Variation-aware Algorithm for Enhanced Video Streaming Quality", 40th Annual IEEE Conference on Local Computer Networks, LCN 2015, Florida, USA, November 2015
7. "Error Correction for Video Streaming to Enhance MPEG Performance Quality", 11th International Conference on Innovations in Information Technology (IIT), Special Theme - Smart Living Cities, Big Data, Sustainable Development, November 01-03, 2015, Dubai, UAE
8. Keynote Speaker, "Mobile Video Delivery: Challenges and Opportunities", 2nd International Conference and Business Expo on Wireless & Telecommunication", April 21-22, 2016, Dubai, UAE.
9. "Performance Evaluation of LoRa Transceiver", International Journal of Computer Science and Software Engineering (IJCSSE), Volume 8, Issue 2, ISSN (Online): 2409-4285 www.IJCSSE.org Page: 25-39, February 2019
10. "Modeling Sensor Distribution in Smart Parking WLAN Networks using IEEE802.11ac Technology", International Conference on Communication Management and Information Technology ICCMIT'20, February 20, 2020.
11. "An enhanced framework for secure smart parking management system smart Parking", International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 2020.
12. "Enhanced Framework for Secure Smart Parking Management System", International Conference on Communication Management and Information Technology ICCMIT'21, 2021.
13. "Prediction of the final size for COVID-19 epidemic using machine learning: A case study of Egypt", Journal of Infectious Diseases Modelling, Vol. 5, Page: 622-634, 2020.
14. "An Adaptive Quality Switch-aware Framework for Optimal Bitrate Video Streaming Delivery", IJACSA, 2020.
15. "Modeling a Cloud-Based Smart Parking WLAN Networks Using IEEE802.11ac Technology", ISC International Journal of Information Security, November 2020, Volume 12, Number 3 (pp. 101{109).
16. "Hyper BCK-Hashing Algorithm: Employing Encoding System Based on Logical Algebra in Enhancing the Secure Hash Algorithms for Cryptographing n-ary Block Code", Accepted in Italian Journal of Pure and Applied Mathematics, on September 22nd, 2021.
17. "A Low Latency Adaptive Video Streaming Framework To Control The Congestion And Reduce The Switching Times Between Quality Levels", Webology (ISSN: 1735-188X), Vol. 19, No. 2, 2022.
18. "An Adaptive Video Streaming For The Best Possible Delivering Experience To Multiple Users In Wireless Networks", Webology (ISSN: 1735-188X), Volume 19, Number 2, 2022.

Training, Conferences, and Workshops Activities :

17th Nov. 1997- 16th April 1997	IAT Institute, PISA, Italy	Successfully completed training activity at IAT Institute, PISA, Italy. The training course named “Managing IP Multicast” lasted 5 months, and had the following program: <ul style="list-style-type: none"> - Acquire knowledge of IP Multicast technology, especially routing protocols. - Study IP multicast implementation and configuration on Cisco routers. - Study and analyze currently available IP multicast management tools. - Configuring IP multicast on simple network topology based on cisco routers. - Practical usage of management tools for monitoring and troubleshooting multicast topology - New developments and research issues in IP multicast management.
10 May - 31 July 2004	Eagle Tech. Company Ltd., Shenzhen, Shanghai, Beijing, China	Chinese Project: PI for the project “ <i>Design & Development of an Intelligent Vending Machine</i> ” I visited Shenzhen Eagle Technology Co., Ltd. China - Training in network management of the vending machines. The invitation for one month starting from 10 May to 31 July 2004.
15 Dec. 2010 – 18 Dec. 2010	Luxor, Egypt	The 10th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT).
11 – 30 Jun. 2011	Shanghai Training Center (STC) - Ministry of Science & Technology, Shanghai, China	International Training Workshop in: “Information Technology & Its Applications”
30 July - 1 Aug. 2012	Galt House Hotel, Louisville, Kentucky, USA	Attendance in 17 th International Conference on Computer Games: AI, Animation, Mobile, Interactive Multimedia, Educational & Serious Games
1 Mar. 2012 - 31 Aug. 2012	Speed School of Engineering, Computer Engineering and Computer Science (CECS) Louisville University, Kentucky, USA	http://louisville.edu/speed/computer/spotlights/welcome-dr-ashraf-abdelaziz.html Acceptance from Computer Engineering and Computer Science Department, Louisville University, Kentucky, USA for Postdoctoral Studying funded by US-Egypt Science and Technology Collaboration Program for 6 Months. <u>My proposed work includes:</u> <ul style="list-style-type: none"> - Check out the latest types equipment for laboratories and the applications in the field of video streaming. - A comprehensive studying of the existing computer networks in the host university. - Improving the flow of video on the internet by solving the problems and performance evaluation for the protocol parameters affecting the transfer of the signal and improving the degree of the quality of the video. - Experiments in a cloud communication
1-3 Nov. 2015	UAEU College of Information Technology	11th Int. Conference on Innovations in Informatics Technology (IIT’15) Dubai, UAE. <ul style="list-style-type: none"> - Publishing a paper “Error Correction for Video Streaming to Enhance MPEG Performance Quality” - Participation and dedicated services as the Session Chair. Session Name: IoT-Security, Privacy and Reliability.
2013-2019	King Saud University	<ul style="list-style-type: none"> - Certificate of Attendance in the International Geo-informatics Conference 2019 organized by Saudi Geographical Society 10-14 Feb. 2019. - Certificates of attendance in: <ul style="list-style-type: none"> • Course Specification and report. • Preparing new faculty program (36 training hours) through the academic year. • Scientific publishing ISI. • Writing and publishing books.

	King Abdulaziz City for Science and Technology (KACST)	1 st . Saudi Conference to Support Scientific Research "Finance, Challenges and Solutions" – Riyadh 2-4 Nov. 2014.
16 Oct. 2019	City of Scientific Research and Technological Application	<ul style="list-style-type: none"> - Certificate of attendance the Workshop: "From Lab to Industry", organized by Knowledge Technology Transfer (KTT). - Certificate of attendance the Workshop: Water Management: Future challenges and opportunities, developed and implemented by SRTA-City & EPRI

Supervision:

- Mary Zarif, Ph.D. student in Alexandria University, Faculty of Engineering, Department of Electrical Engineering.
Title: "Studying the Effect of Changes in Video Streaming Parameters to Enhance MPEG Performance Quality".
- Wafa Kahtani, MSc student in King Saud University, College of Computer & Information Sciences.
Title: "An adaptive Quality switches-aware framework for optimal bitrate video streaming delivery"
- Wafa Kahtani, MSc student in King Saud University, College of Computer and Information Sciences.
Title: "An Adaptive framework for enhanced security performance of smart parking networks"
- Amjad Habshan, MSc student in King Saud University, College of Computer and Information Sciences
Title: "An Adaptive framework for performance enhancement of IoT smart homes security management".
- Hagar Omar Ahmed - Student in Computer and Communications Department in Faculty of Engineering – Alexandria University, Title "Performance Evaluation of Optimization Algorithm Applied on WSN".
- Hend Khaled AbdelHamid, Nada Alaa Mohamed - Students in Computer and Communications Department in Faculty of Engineering – Alexandria University, Title "Performance Evaluation of Video Streaming on the Internet with a Secure Platform."

Recent professional development activities

- Reviewer in Int. Journal of King Saud University: Engineering Sciences for the Elsevier Editorial System (EES)
- Reviewer in Journal of Circuits, Systems, and Computers
- Member of NCAAA Committee and QMS Committee in King Saud University - College of Computer and Information Sciences - Department of Computer Engineering
- Member of Council of Department of Computer Engineering, in King Saud University - College of Computer and Information Sciences - Department of Computer Engineering.
- Member of Council of Informatics Institute, in City of Scientific Research and Technological Applications (SRTA-City).
- Member of Number of Technical and Administrative Committees.
- Session Chair, "Internet of Things (IoT) - Security, Privacy, Trust and Reliability", 11th International Conference on Innovations in Information Technology (IIT'15), Special Theme-Smart Living Cities, Big Data, Sustainable Development, November 01-03, 2015, Dubai, UAE.
- Keynote Speaker, "Mobile Video Delivery: Challenges and Opportunities", 2nd International Conference and Business Expo on Wireless & Telecommunication", April 21-22, 2016 The Oberoi Centre, Dubai, UAE.
- Reviewer in MSc. Thesis Proposals – King Saud University
- Reviewer in International Journal of Big Data Intelligence (IJBDI).
- Reviewer in Int. Journal of Cyber-Security and Digital Forensics (IJCSDF) eISSN 2225-658X Published by The Society of Digital Information and Wireless Communications.

Awards and Prizes:

- A certificate of appreciation from the Faculty of Electronics Engineering - Menoufia University for the efforts and active participation during my career on the occasion of the college's celebration of the golden jubilee of graduating fifty academic years.
- A certificate of appreciation from the City of Scientific Research and Technological Applications for the efforts in designing and developing the website, which contributed to winning 3rd place at the level of research institutes and centers at the level of the Arab Republic of Egypt. The competition for choosing the best website for universities, institutes, and research centers for the year 2020/2021.