Work: Arab Academy for Science and Technology, Abu-Keer, B.O Box 1029, Alexandria, Egypt.
Home: 29 Ibrahim Sherif Street, 3rd floor, Apt. 7, Sidi Gaber,21311, Alexandria, Egypt.

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Home: (203)-4297501
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e-mail: khedr@aast.edu
Web: www.aast.edu/~khedr

Prof. Mohamed Essam Khedr

Objective   To utilize my teaching, research and administrative skills to benefit the organization i am working in and society i belong to

Employment   April 2019- now

Dean of Admission and Registeration: Arab Academy for Science and Technology, Egypt

June 2016- April 2019

Dean of Educational affairs: Arab Academy for Science and Technology, Egypt

April 2014- May 2016

Dean of students affairs: Arab Academy for Science and Technology, Egypt

March 2013- March 2014

Vice program of African and Asian affairs sector: Arab Academy for Science and Technology, Egypt

February 2013- now

Full Professor: Arab Academy for Science and Technology, Egypt

February 2009- January 2013

Associate professor: Arab Academy for Science and Technology, Egypt

July 2008- July 2010   Port training Institute, Arab Academy for science and Technology , Alexandria Egypt
Manager of Education and Training

January 2005–December 2008   Arab Academy for Science and Technology, Egypt
Assistant Professor, Communications and Electronics Department

August 2005- now Virginia Polytechnic Institute and State University, USA

Adjunct Professor, Bradley Department of Electrical Engineering

Academic Experience

- Teaching undergraduate courses
  - Communication system I (Analog communications)
  - Data Communications and networking
  - Communication theory (signals and systems)
  - Communication system 4 (digital Communications)
  - Communication system II (stochastic process and noise)
  - Communication networks
  - Communication system I (Analog communications), AAST Cairo branch
  - Introduction to computers
  - Structured Programming in C
  - Telecommunication System Engineering
  - Mobile Communications
  - Visual basic Programming
  - Selected Topics in Communications

- Teaching graduate course
  - Satellite Communications
  - Audio and Video compression and Applications
  - Communications seminar
  - Wireless Communications
  - Advanced Digital Communication
  - Adaptive Signal Processing
  - Multimedia Communication Systems
  - Multimedia Information Systems
  - CAD for communication Systems
  - Operations Management (MBA)

- Supervising B.Sc graduation projects (one year duration)
  - Design and Analysis of Pervasive, Ad Hoc Wireless Communications and Networking .
  - IEEE 802.11 Wireless Local Area Networks: Analysis and Performance Evaluations
  - Evaluation of WiMax systems
  - Image processing in Telecommunication applications
  - A DSP Implementation of WiMax Systems
  - A cognitive radio wireless system using artificial intelligence techniques
  - Design and Evaluation of Vehicular Communications
  - Embedded systems and their applications in Smart homes
  - Embedded Systems for Collision avoidance in Trains

- Developing training courses (5 days) in GSM, UMTS, WLAN and Communication networking

Communication courses coordinator and head: responsible for the updates, consistence, monitoring and paper work of communication courses in the electronics and communication department, AAST

Graduate studies program coordinator: serving as the program coordinator for the graduate studies at the department of electronics and communications, Arab academy for science and technology.

ECE Graduation projects coordinator: responsible for administering the process of distributing students to the different B. Sc graduation projects and maintaining their progress records.

Undergraduate Registration coordinator: responsible for administering the process of registration of undergraduate students to the different B. Sc courses offered at AAST and maintaining their progress records

Undergraduate Exam coordinator: responsible for administering the process of organizing final exams at AAST.

Undergraduate timetable coordinator: responsible for the timetable generation of the electronics and communication department.

IEEE treasurer, Alexandria Subsection

IEEE professional chair , Alexandria Subsection

Courses taught at   Virginia Polytechnic Institute and State University, USA

- Teaching graduate courses
  - Stochastic process and signals I
  - Wireless Communications
  - Digital Communications
  - Advanced Topics in Computer Engineering
  - OFDM and its related applications
  - Neural Networks and Fussy Systems
  - Software defined radio and cognitive radio
- Assisting graduate courses
  - Cellular Communications , Prof. William Tranter
  - Software Defined Radio , Prof. J. Reed
  - Stochastic process and signals I , Prof. L. Beex

August 2000–January 2005   University of Ottawa   Ontario, CA

Research Assistant

- Conducting research in the field of pervasive computing and context awareness under the supervision of Prof. Ahmed Karmouch.
- Part of the PhD thesis work was supported by Mitel Coop. and resulted in a publication at the IEEE MATA'02 conference.
- I was the principle investigator, designer and developer for the ACAI infrastructure: Agent-based, Context-aware Infrastructure. More information about the project can be found at http://www.site.uottawa.ca/~mkhedr/research.html.
- I developed a set of core ontologies using the emerging web standard, OWL, which is based on XML technologies. More information at: http://www.site.uottawa.ca/~mkhedr/contexto.html.
- I developed an inductive fuzzy inference system for reasoning about uncertainty in context-aware applications suited for pervasive environments.
- I implemented an agent-based system, using JADE toolkit, for negotiating and using context information in pervasive environments. This lead to a publication in the IEEE Intelligent Systems magazine, December 2004.
- Conducted performance evaluation and use-case testing to measure the effectiveness and correctness of the developed agent software.
- Implemented a service-discovery application, an event-notification system and a context-aware instant messaging system as demonstrations of the ACAI system.
- Designed more than dozen XML schemas that were used in the ACAI configuration infrastructure. This also includes their Java-interfaces using the Castor software.
- A repository system was developed using MySQL database to store and manipulate ontologies and contexts in the ACAI infrastructure.
- Preliminary study of using SIP in the Infrastructure for session management and

resulted in a Journal paper at the Journal of network and computer applications.

2000–2004   University of Ottawa   Ontario, CA
Teaching Assistant

I was a TA for more than 8 times at university of Ottawa. some of the courses I taught:

- Communication systems (Analog and Digital):.
    Reference: Prof. Peter Galko. www.site.uottawa.ca/~galko and professor Abbas Yongacoglu, http://www.site.uottawa.ca/~yongacog/
- Computer networks:.
    Reference: Prof. Oliver Yang. www.site.uottawa.ca/~yang
- Image processing:.
- Computer microprocessors:.
    Reference: Prof. Abdul Al-Dhaher, http://www.site.uottawa.ca/~dhaher/

1997–2000   Arab Academy for Science and Technology,   Alexandria, Egypt
Research Assistant, Communications and Electronics Department

- Conducting research in the field of image processing in telecommunication applications. This included the development of a video encoder/decoder and a novel algorithm that explored the theory of wavelets and motion estimation.

1997–2000   Arab Academy for Science and Technology,   Alexandria, Egypt
Teaching Assistant , Communications and Electronics Department

I was a TA for more than 20 courses. This includes teaching, lab supervisions, and proctoring. Some of the courses I taught:

- Introduction to communication systems (Signals and Systems) (Computer and Communication Departments): 10 times
- Communication systems I (Analog communications) (Computer and Communication Departments): 10 times
- Digital communication systems: 3 times.
- Electronics I: 3 times.

1997–2000   MSK communication Systems, Egypt
Technical Support Engineer

I was a responsible for installing and maintaining computer networks on medium scale and all related software requirements. Developed Java applications for telecommunication applications

Education   2000–2004   University of Ottawa

- **PhD, Electrical Engineering.**

Advisor: Dr. Ahmed Karmouch.
Dissertation Topic: *Management of Context Information in Pervasive Computing Environments.*
Passed Ph.D. candidacy in December 2003
GPA : A
Dissertation was nominated for best dissertation of the year (2005) at the University of Ottawa

1997–2000   Arab Academy for Science and Technology, Egypt

- **MS, Electrical Engineering.**

Advisor: Dr. El-Sayed Youssef, Faculty of Alexandria, Egypt.
Dr. Ehab Sabry, Arab Academy for Science and Technology
- Dissertation Topic: Wavelet packets for video compression and motion estimation.
- GPA: 3.95

1992–1997   Arab Academy for Science and Technology, Egypt
- **BSc, Electrical Engineering.**

Graduation Topic: Personal and satellite communications.

GPA: 3.91/4.0, first rank with honor

Computer skills

Programming and Scripting Languages:
- Visual Basic, C, C++, Java, VB, Pascal

Network Protocols and Simulators:
- TCP/IP, Routing Protocols, QoS Protocols.
- NS-2, OPNET

Database:
- SQL, MySQL, XML-based repository systems

Operating Systems:
- Windows.
- Fair in UNIX systems.

Knowledge Representation and Mark-Up Languages:
- OWL, RDF, and XML.

Software Packages:
- Matlab, Mathcad, Jena, Protégé, Xylinx, Castor, MySql, XML-Spy.

Research interests

Wireless and digital communications, wireless networking and IOT, cognitive radio, Pervasive/Mobile Computing, Mobile data Management, Semantic Web, Distributed Systems, Artificial/Computational Intelligence and Multi Agent Systems, Multimedia and image processing

Professional activities

- Laboratories coordinator and committee member at the Arab Academy for Science and Technology
- Alexandria and North Delta IEEE Newsletter Editor and treasurer (July 2006-December 2007)
- Active member in the Ambient Networks project supported by the European Union. http://www.ambient-networks.org, January 2004- January 2005.
- Co-organizer of the First International Workshop on Managing Context Information in Mobile and Pervasive Environments, MCMP 2005, held with the 6th IEEE MDM conference, May 9 2005, Ayia Napa, Cyprus.
- Reviewer IEEE JSAC, ICCCE 2008
- Reviewer for IEEE-GCC 2007
- Reviewer for IASTAD WOC 2007, Montreal, Canada
- Program Committee of the " International Workshop on Modeling and Retrieval of Context", 2006, 2007
- Program Committee of the "Second International Workshop on Modeling and Retrieval of Context", Edinburgh, Scotland - 2005 and the "International Symposium on Explanation-aware Computing", Washington, D.C. - November 3-6, 2005
- Program Committee of the "Third International Workshop on Modeling and Retrieval of Context", Edinburgh, Scotland - 2006 Boston, USA - July 16-17, 2006
- Reviewer for IEEE CCECE 2006 conference, Ottawa, Canada.

- Reviewer for 8th International Conference on Management of Multimedia Networks and Services (MMNS 2005), 15th IEEE International Conference on Computer Theory and Applications
- Reviewer for IEEE Internet Computing, JPDC, JPCC and IPSI BgD, IJCA, ETRI Journals.
- Program committee of the Protection By Adaptation 2005 workshop and 2nd International workshop on ubiquitous computing IWUC 2005 to be held in conjunction with the ICEIS2005 in Miami, USA, from May 24 to May 28 2005.
- Program committee of the Context for Web Services to be held in conjunction with the International and Interdisciplinary Conference on Modeling and Using Context (CONTEXT-05)
- Session Chair, IEEE CCECE 2002, Winnipeg, Canada 2002
- Program Committee, First International Workshop on Software Aspects of Context (IWSAC 2004) Lebanon 2004.
- Reviewer for the LOCA 2005, Networking 2004, MMNS 2004, WebMedia 2004 conferences.
- Presenter at the MICON Industrial conference 2001, 2002, Mitel Cooperation, Kanata, Ontario.

Honors
- University of Ottawa PhD admission scholarship 2000-2004
- CITO PhD award year 2000.
- Arab Academy For science and technology Master admission scholarship.
- Arab Academy For science and technology BSc admission scholarship.

Supervision of graduate students

Over 20 more students since that time (available upon your request)

Name	Program	Dissertation Topic	Co-advisors	University	Year of completion
1. H. Shatila	PhD in ECE	Cognitive Radio in 802.16	Prof. J. Reed	VT-USA	2012
2. Entesar Gemeay	PhD in ECE	OFDM	Dr. Said Elnoby	Tanta	2010

Publications
Available on Google Scholar
https://scholar.google.com.eg/citations?user=MuVcaLEAAAAJ&hl=en&oi=ao

Personal Information
- Married
- Three childeren (Canadian and Egyptian nationality)
- Egyptian and Lebanese nationality

References and other Information are available upon request