

MOHAMED ABDELRAHEEM Ph.D.

PERSONAL INFORMATION

Mohamed Medhat Tawfik AbdelRaheem

Born in EGYPT, 1982

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WORK EXPERIENCE

2016–Present Assistant Professor, Faculty of Engineering,
Assiut University, Assiut, EGYPT

Assiut University

Teach graduate and undergraduate courses in the field of electrical engineering.
Perform scientific research in the field of wireless communication.

2011– 2016 Instructor/GTA, VIRGINIA TECH. Virginia, USA

Virginia Tech.

During this period I taught two courses ECE 3614 Introduction to communication systems (Summer 2015) and ECE 4500 Fundamental of Computer Systems (Fall 2015) .
Graduate Teaching Assistant GTA for ECE 4500 Fundamental of Computer Systems (Spring 2015). Before that, I was Graduate Research Assistant (GRA) funded by the Egyptian government through VMENA program.

2007– 2011 Demonstrator/Assistant lecture , ASSIUT
UNIVERSITY, Assiut, EGYPT

Assiut University

In this job, I participated in teaching different electrical engineering undergraduate courses, supervising graduation projects while preparing for my master degree.

2005– 2006 Network Controller, Rayatelecom, Cairo, EGYPT

Rayatelecom

In this job, I was responsible of troubleshooting Rayatelecom (a major Internet service provider later was acquired by Vodafone) core network.

EDUCATION

2011-2015 Virginia Tech.

*Doctor of
Philosophy (Ph.D.)*

GPA: 3.7 · Electrical Engineering (Wireless Networks)
Dissertation: *Spectrum-efficient Cooperation and Bargaining-based Resource Allocation for Secondary Users in Cognitive Radio Networks*
Advisors: Prof. Scott MIDKIFF & Assoc. Prof. Mustafa ELNAINAY

2014-2015 Virginia Tech.

*Graduate
Certificate*

GPA: 4 · *Future Professoriate Graduate Certificate.*
Description: A 12 credit hours graduate certificate aims to prepare the future faculty and academic leaders by exposure to concepts that break the mold of existing practices in higher education.

. 2007-2010 Assiut University

*Master of Science
(M.Sc.)*

GPA: 3.8 · *Electrical Engineering (Communication)*
Thesis: *Human Identification using Electrocardiograph Signal* . Advisors:
Prof. Hany SELIM & Assoc. Prof. Tarik ABDELHAMID

1999-2004 Assiut University

*Bachelor of
Science (B.Sc.)*

Very Good with honor degree (Ranked 3rd), *Electrical Engineering (Communication and Electronics)* .

PUBLICATIONS

Ref: [Google Scholar Profile](#)*Journal Publications*

- **M. AbdelRaheem**, M. Abdel-Rahman, M. El-Nainay, and S. F. Midkiff *Spectrum efficient Resource Allocation Framework for Cooperative Opportunistic Wireless Networks* submitted to IEEE Transaction on Cognitive Communication and Networking.
- **M. AbdelRaheem**, H. Selim , and T. Abdelhamid *Human Identification Using the Main Loop of the Vectorcardiogram* American Journal of Signal Processing 2012, 2(2): 23-29,2012

Conference Publications

- **M. AbdelRaheem**, M El-Nainay *An analytical study of the Primary user activity pattern effect on the performance of cooperative opportunistic networks* Submitted to ICNC 2017.
- M. J. Abdel-Rahman, **M. AbdelRaheem**, A. B. MacKenzie, K. Cardoso, and M. Krunz, *On the orchestration of robust virtual LTE-U networks from hybrid half/full-duplex Wi-Fi APs*, in Proceedings of the IEEE WCNC Conference 2016.
- M. J. Abdel-Rahman, **M. AbdelRaheem**, and A. B. MacKenzie, *Stochastic resource allocation in opportunistic LTE-A networks with heterogeneous self-interference cancellation capabilities*, in Proceedings of the IEEE DySPAN Conference, 2015, pp. 200-208
- **M. AbdelRaheem**, M El-Nainay, S F Midkiff *Analytical and Simulation Study of the Effect of Secondary User Cooperation on Cognitive Radio Networks* in Proceedings of the IEEE WCNC Conference 2015
- **M. AbdelRaheem**, M El-Nainay, S F Midkiff *Spectrum Occupancy Analysis of Cooperative Relaying Technique for Cognitive Radio Networks* in Proceedings of the ICNC Conference 2015
- **M. AbdelRaheem**, Mahi O Helmi *Digital Modulation Classification through time and frequency domain features using Neural Networks* in Proceedings of the IX International Symposium on Telecommunications (BIHTEL), 2012
- **M. AbdelRaheem**, H. Selim, and T. Abdelhamid *Human identification using main loop of the VCG contour,* in Proceeding of 8th ECTI-CON Conference 2011, pp. 1011-1014.
- **M. AbdelRaheem**, H. Selim , and T. Abdelhamid *Human identification using time normalized QT signal and the QRS complex of the ECG,* in Proceeding of CSNDSP Conference 2010, pp. 755-759.
- **M. AbdelRaheem**, H. Selim , and T. Abdelhamid *Human identification using ECG Signal,* in Proceeding of the 27th national radio science conference (NRSC) 2010.

FUNDED PROJECTS

*ITIDA Fellowship,
Role: PI*

2008-2009 Human Identification Using ECG Signal
INFORMATION TECHNOLOGY INDUSTRY DEVELOPING AGENCY (ITIDA) FELLOWSHIP. ITIDA sponsored my M.Sc research with total fund of 73K LE.
Ref: [ITIDA Website](#)

*ITIDA PDP,
Role: Researcher*

2008-2010 Universal Ethernet/WIFI Enabled RFID read/write transceiver
ITIDA PRODUCT DEVELOPMENT PROJECT (PDP). Design a prototype RFID readers for hotels and metro applications with Ethernet and Wireless capabilities.
Ref: [ITIDA Website](#)

ENTREPRENEURSHIP

UE-Systems Co-Founder of UE-Systems a leading software company located in Assiut. The company was founded through ITIDA Technology Innovation and Entrepreneurship Center (TIEC) incubation program and listed as one of its most successful stories.
Ref: [TIEC Website](#)

TRAINING, CERTIFICATES AND SKILLS

Assiut University

- **FLDP:** Attended 12 different workshops through Assiut university Faculty and Leadership Development Program (FLDP). These workshops cover different fields in research, teaching and management in academia.
- **Preparing The University Lecture:** Attended a one week intensive training mandatory by the university including the new directions in teaching and exam preparation.

ITIDA

TIEC Entrepreneurs Preparing Training: A three weeks intensive training for TIEC incubation program including Project management, Financial management, Sales and Marketing skills and Knowledge management workshops.

DAAD

DAAD Summer School in Mobile Communication: A Two weeks summer school introduces graduate students in future research topics in Mobile communication area. The school was held in the Ilmenau university of technology (a.k.a) TU Ilmenau, GERMANY

Certificates

- National Instruments (NI) Certified LabVIEW Associate Developer (CLAD)
- Cisco Certified Network Associate (CCNA)

Computer Skills

- Matlab
- IBM CPLEX (Optimization tool)
- OPNET (Discrete event network simulator)
- C/C++
- MS office

August 14, 2016