PERSONAL DETAILS	
Full Name	***Mahdi Mahmoud Abdullah Barhoush.***
Address	***Kufr-allabad, Tulkarm, Palestine.***
e-mail	***mahdibarhoush@aauj.com***

DUCATION AND QUALIFICATIONS		
Name and address of school, college or university	Dates attended	Subjects/courses taken and qualifications obtained
RWTH Aachen – Germany ***http://www.rwth-aachen.de/***	***2013- 2015***	***Master of Science in Communication Engineering MsCE. (Grade Point Average of 1.10/1.00 OR 3.90/4.00)***
Arab American University – Jenin- Palestine ***http://www.aauj.edu***	***2008- 2012***	***Bachelor Degree in Telecommunication Engineering (TCE***). ***(Grade Point Average of 4.00/4.00 and Got the Dean's Honer List 8 times and finished the first in my class, faculty and university)***

MASTER THESES

Wireless Communication for Distributed Control Networks:

Linear Consensus and Non-linear Distributed Optimization are considered the major application areas in Multi-Agent System networks. Their theory with the help of the algebraic graph theory is introduced and investigated in different fixed and switching communication topologies. We established a link between the control theory behind these applications and the information theory that studies the effect of the constrained wireless channel resources to describe their influence on the system overall performance.
Limited variable channel capacity, quantization, and resource allocation techniques are verified to have their impact on introducing degradation in system robustness and increasing its latency. Therefore, we proposed two MAC protocols (Adaptive Quantization protocol AQ and Adaptive Transmission Length protocol ATL) which exploit the variable channel data rate to enhance the network connectivity and improve the system performance. Moreover, a Correction Algorithm CA used with the mentioned protocols is proposed to overcome and minimize the quantization error introduced by the limited channel capacity.

ARTICLES

- *Adaptive Control in Cyber-Physical Systems: Distributed Consensus Control for Wireless Cyber-Physical Systems*
  External Link: https://www.researchgate.net/publication/305689356

BACHLOR THESES

wavelet based multicarrier code division multiple access:

- *Introduction to evolution of wireless communication systems, Code Division Multiple Access **CDMA**, Multi Carrier Systems and Orthogonal Frequency Division Multiplexing **OFDM**, and Wavelet Transform **WT**.*
- *Comparison between a new proposed MC-CDMA system that is based on Wavelet Transform instead of Fourier Transform.*
- ***MATLAB 7.10.0 (R2010a)** is used to compare between the performance of the wavelet based MC-CDMA system and the Fourier based MC-CDMA system over the AWGN in terms of system capacity, BER and $PAPR$ in both uplink and downlink transmission.*

WORK AND TRAINING

- ***University Lecturer at AAUJ (September, 2016 – now)***
  >> Works as University lecturer at the department of telecommunication engineering at the Arab American University in Jenin AAUJ.
  >> courses Thought: Electrical Circuits, Signals and Systems, Probability and Random Variables, Measurements and Instrumentations, Engineering Drawing, Introduction to Computers, Electrical Circuits lab, Electronics lab, analog and digital communication labs, Antenna and microwave labs.
- ***Teaching Assistant (February, 2016 – August, 2016)***
  >> Works as Teaching Assistant TA at Arab American University in Jenin AAUJ and supervises the Telecommunication Engineering labs (Analog lab, Digital lab, Digital signal processing lab, Antenna and Microwave lab, Circuit lab and Electronics lab).
- ***RFC and KPI Engineer (October, 2014 – February, 2015)***
  >> I did my master internship in Huawei Technologies in Dusseldorf as an RFC and KPI Engineer. I worked at the "Vodafone Germany GU Swap Project
- ***Teaching Assistant (July, 2012 – June, 2013)***

OTHER SKILLS AND ADDITIONAL INFORMATION

Computer Skills	- *Excellent knowledge in Matlab program, AutoCAD, LabView and C++ programming.*
Awards	- *DAAD scholarship award to study Master in Germany.* - *Got the first in my class, faculty and university in my bachelor degree with G.P.A of 4* - *Got the first in Tulkarm (my city) in the scientific stream – Tawjihi- with an average of 97.4 %.* - *Got the Dean's Honor List 8 times in AAUJ.*
Languages	- *Arabic: Native language.* - *English: very good in reading, listening, writing and speaking.* - *German: level of B1.*