

Dr. Ghadir MADI

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1- Personal Information

Name: **Ghadir MADI**
Nationality: **Syrian**
Date of Birthday: **15-08-1981**
Place of Birthday: **Lattakia**
Marital Status: **Married**



2- Education and Qualifications

- 2008-2012** **Ph.D. (Electronic)**, area of Wireless Communication and Microwave, **University of Poitiers, France.**
- 2007-2008** **Master of Research**: Science and Technology of Information and Communication, **University of Poitiers, France.**
- 2004-2005** **Post-graduate degree**: Electrical Engineering, specialty : Electrical Communications, **Tishreen University, Latakia, Syria.**
- 1999-2004** **Bachelor's degree** (Electrical Engineering), section : Electronic, **Tishreen University, Latakia, Syria.**

3- Employment History

- 2004-2007** **Assistant**, Department of Communication and Electronic Engineering, Tishreen University, Latakia, Syria.
- 2012-2017** **Lecturer (PH.D)**, Department of Communication and Electronic Engineering, Tishreen University, Latakia, Syria.
- 2018-2023** **Associate Professor**, Department of Communication and Electronic Engineering, Tishreen University, Latakia, Syria.
- 2021-2023** **Director of the Technical Computer Institute**, Tishreen University, Syria.
- 2023-Preaent** **Head of the Department of Computer Technologies Engineering**, Al-Ayen University, Iraq.

4- Research Interests

- Wireless Communications.
- MIMO Antennas Techniques.
- RADAR and Microwave Propagation.

5- Expertises

A - Courses taught in public universities:

Course Name	Department, University	Academic year
Radar and Sonar Systems	Communication, Tishreen University	2013-2023
Data Communication	Communication, Tishreen University	2014- 2023
Digital Communication Systems	Computer Engineering, Tishreen University	2013-2023
Programming Applications in Communication	Communication, Tishreen University	2016-2023
Advanced Antennas	Master of Science, Tishreen University	2015- 2023
Algorithms and problem solving skills	Communication, Tishreen University	2013-2015
Network design and planning	Communication, Tishreen University	2012-2014
Introduction to Programming	Applied Faculty, Tishreen University	2016-2019
Computer Basics	Applied Faculty, Tishreen University	2017-2019
Industrial Informatics	Industrial Automation Department, Tartous University	2018-2019
Data Security	Applied Faculty, Tishreen University	2018-2019

B - Courses taught in private universities:

1 - Arab Academy for Science, Technology & Maritime Transport, Lattakia Branch

Course Name	Department	Academic year
Computer Networks	Computer Engineering	2022-2023
Introduction to computers	Computer Engineering	2022-2023
Data Security	Computer Engineering	2018-2020 2022-2023
Electron 1	Computer Engineering	2022-2023
Programming Applications	Computer Engineering	2016-2020 2022-2023
Digital Electronics	Computer Engineering	2015-2020
Digital System Design	Computer Engineering	2018-2021
Discrete Mathematics	Computer Engineering	2016-2020

Electron 2	Computer Engineering	2015-2016
Computer 3	Transport	2015-2018
Introduction to information	Management	2019-2020

2 - University Of Kalamoon- Syria

Course Name	Department	Academic year
Communication Theory 1	Communication Electronic	2019-2021
Communication Theory 2	Communication & Electronic	2019-2022
Radio communication Systems	Communication & Electronic	2019-2022
Electronics Fundamental	Communication & Electronic + Mechatronics	2019-2021
Data Communication	Communication & electronic	2019-2022
Satellite Communication	Communication & electronic	2021-2022

C - Supervision of Master and PhD students:

- End of supervision of 5 Master students and one Ph.D student.
- Supervision in progress: supervision of 5 current Master students and 3 Ph.D. students.

D – Membership:

- Member of Quality Assurance Committee, Faculty of Mechanical and Electrical Engineering, Tishreen University.
- Member of the Student Affairs Committee, Faculty of Mechanical and Electrical Engineering, Tishreen University.
- Member in many Masters and Ph.D. jury.

E - Other Skills: Training Courses:

- 2009: A two-month training course at Hydro-Québec's research institute, IREQ, Montreal, Canada.
- 2008: Stage for six months in the XLIM laboratory, University of Poitiers, France

F- Conferences and workshops:

- 18th European Signal Processing Conference, EUSIPCO. Denmark. Aug. 2010.
- 19th European Signal Processing Conference, EUSIPCO. Barcelona, Spain. Sept. 2011.

- Colloque du Groupe sur le Traitement du Signal et des Images, Bordeaux, France. 2011.
- Workshop: Evolution of mobile communication systems and transition towards the fourth Generation. Damascus, Syria, 2015.

G - Computer Skills:

- Operating Systems: Linux and Windows.
- Windows Microsoft Office package, LaTeX Program.
- Programming Languages: MATLAB, C++, Octave.

H - Languages Skills:

- 1- Arabic: native language.
- 2- French: near native speaker.
- 3- English: good.

I – Ph.D. Thesis:

Optimization of a sensor network by cooperative MIMO technique. Possible applications:
Smart Grid, Remote Sensing.

Year: 2012- University of Poitiers, France.

6- Publicatios

[1] O. James, **G. Madi**, B. Vrigneau, R. Vauzelle and N. Richard. “Cooperative Closed-loop Techniques for Optimized Transmission applied to a WSN in a Power Substation”. *3rd IEEE International Conference on Smart Grid Communication*. Taiwan, 2012.

[2] **G. Madi**, F. Sacuto, B. Vrigneau, B. Agba, Y. Pousset, R. Vauzelle, F. Gagnon, «Impacts of Impulsive Noise from Partial Discharges on Wireless Systems Performance: Application to MIMO Precoders», *EURASIP Journal on Wireless Communications and Networking*, 2011 :186.

[3] **G. Madi**, C. Nsiala-Nzéza, B. Vrigneau, Y. Cocheril, M. Berbineau, R. Vauzelle, «Comparison of max-dmin and P-OSM Precoders performance for robust and high data rate MIMO transmissions in underground tunnels», *74th IEEE Vehicular Technology Conference: VTC2011-Fall*. USA, Sept. 2011.

[4] **G. Madi**, B. Vrigneau, A.-M. Poussard, R. Vauzelle, «Cooperative MIMO Precoders for Energy-efficient Transmission in Wireless Sensor Network», *19th European Signal Processing Conference, EUSIPCO*. Barcelona, Spain. Sept. 2011.

[5] A. Moldovan, **G. Madi**, B. Vrigneau, T. Palade, R. Vauzelle, «SVD Algorithms and Quantization Applied to MIMO Max-dmin Based Precoder», *Signal Processing and Applied Mathematics for Electronics and Communications, SPAMEC*. Cluj-Napoca, Romania. Aug. 2011.

[6] **G. Madi**, B. Vrigneau, Y. Pousset, R. Vauzelle, B. Agba, «Impulsive noise of partial discharge and its impact on minimum distance-based precoder of MIMO system », 18th European Signal Processing Conference, EUSIPCO. Denmark. Aug. 2010.

[7] **G. Madi**, B. Vrigneau, Y. Pousset, R. Vauzelle, «A realistic MIMO time-variant channel applied to diagonalizing precoders», International Conference on Intelligent Transport System Telecommunications, ITST. Lille, France. Oct. 2009.

[8] **G. Madi**, B. Vrigneau, A.-M. Poussard, R. Vauzelle, «Intégration de précodeurs pour MIMO coopératif dans un réseau de capteurs», Colloque du Groupe sur le Traitement du Signal et des Images, GRETSI. Bordeaux, France. Sept. 2011.

[9] رزان حبيب, غدير ماضي. تطبيق المرمز المسبق X and Y Precoder في أنظمة الهوائيات المتعددة MIMO بإضافة قناة راجعة محدودة. مجلة جامعة تشرين للبحوث والدراسات العلمية, 38 (6), 2016.

[10] غدير ماضي, تحليل أداء تقنيات الحلقة المغلقة في أنظمة الهوائيات المتعددة MIMO في ظروف التشغيل العملية. مجلة جامعة تشرين للبحوث والدراسات العلمية, 39 (1), 2017.

[11] Rita Hassoun , Aws Khadour ,**Ghadir Madi** , " Reducing Energy Consumption in WSN Based on MIMO and IOT Environment ". International Journal of Computer Techniques (IJCT) , Vol. 4 - Issue 3 (62-66) – 2017, ISSN: 2394 – 2231.

[12] غدير ماضي. تأثير ترابط القناة في النموذج Weibull-Gamma على أداء خوارزمية اختيار الهوائيات في النظام MIMO STBC. مجلة جامعة تشرين للبحوث والدراسات العلمية, 39 (6), 2017.

[13] غدير ماضي. تحليل تأثير اقتران الهوائيات المتبادل على أداء المرمزين المسبقين ZF و Max-SNR في أنظمة الهوائيات المتعددة MIMO. مجلة جامعة تشرين للبحوث والدراسات العلمية, 40 (3), 2018.

[14] أوشين داؤد, السموّل صالح, غدير ماضي. تقييم أداء خوارزمية اختيار الهوائيات RAISE في نظام الهوائيات متعدد المداخل والمخارج المكثف ملوّث التأشير. مجلة جامعة طرطوس للبحوث والدراسات العلمية, سلسلة العلوم الهندسية, المجلد (2), العدد (1), 2018.

[15] ماري تيتيزيان, خولة حموي, غدير ماضي. استخدام الهندسة العشوائية وطريقة المُميّزات لنمذجة وتحليل التداخل في رادار السيارات. مجلة جامعة تشرين للبحوث والدراسات العلمية, 42 (1), 2020.

[16] تيسير العيسى, غدير ماضي, معين يونس, تصميم وتنفيذ وحدة قواطع الحالة الثابتة عالية الاستطاعة لمعدّلات الرادارات النبضية الحديثة اعتماداً على الربط التفرعي لترانزستورات Mosfet ذات الاستطاعة العالية. مجلة جامعة تشرين للبحوث والدراسات العلمية. سلسلة العلوم الهندسية, مجلد 42, العدد 6, 2020.

[17] تيسير العيسى, غدير ماضي, معين يونس, تحليل وتنفيذ محوّل نبضي عالي الاستطاعة لمعدّلات الرادارات النبضية. مجلة جامعة تشرين للبحوث والدراسات العلمية. سلسلة العلوم الهندسية, مجلد 43, العدد 3, 2021.

[18] تيسير العيسى, غدير ماضي, تصميم معدّل نبضي خطي عالي الاستطاعة اعتماداً على ترانزستورات الحالة الصلبة. مجلة جامعة البعث, مجلد 43, 2021.