

1. CURRICULUM VITAE

Nom et prénom :

LAKHOUA Mohamed Najeh

Grade :

Maître de Conférences

Fonction :

Enseignant-chercheur
département Génie Industriel

Date de naissance :

16/11/1971

Nationalité :

Tunisienne

1. Cursus :

Dates d'obtention	Diplômes	Spécialités	Institutions
2015	Habilitation Universitaire à Diriger des Recherches	Génie Electrique	ENICarthage
2008	Doctorat	Génie Industriel	ENIT
1999	Diplôme des Etudes Approfondies	Automatique-Productique	ESSTT (ex ENSET)
1996	Diplôme de l'ESSTT : Maîtrise en sciences et techniques	Génie Electrique	ESSTT (ex ENSET)
1992	Baccalauréat de l'Enseignement Secondaire	Sciences expérimentales	Lycée Secondaire Carthage Présidence

2. Expériences professionnelles :

Dates (Début-Fin)	Employeur	Poste
Depuis Mars 2017 à ce jour	Département Génie Industriel, ENICarthage	Maître de Conférences en Génie Electrique
2017-2020	ENICarthage	Membre du conseil scientifique de l'ENICarthage
Sept 2011 - Mars. 2017	Département Génie Industriel, ENICarthage	Maître assistant en Génie Electrique

Dates (Début-Fin)	Employeur	Poste
Sept. 2009 - Sept. 2011	Département d'Electronique, Institut Supérieur des Sciences Appliquées et de Technologie de Mateur (ISSATM)	Maître assistant en Génie Electrique
Sept. 2002 - 2009	Département d'Electronique, ISSAT Mateur	Assistant en Génie Electrique
2005-2011	ISSAT Mateur	Membre du conseil scientifique de l'ISSAT Mateur
Sept. 1996 - 2002	Ministère de l'éducation	Professeur de l'enseignement secondaire technique

3. Modules assurés: (les 5 dernières années)

Module assuré	Classes	Mots clés
Cours Intégrés d'Automatisme industriel	Ingénieurs GSIL	Systèmes automatisés, GRAFCET, automates programmables industriels
Automatique générale	Ingénieurs GSIL	Systèmes continus, systèmes discrets, représentation d'état
Cours de Modélisation systémique et optimisation	Mastère de recherche ARTI	Systemique, SADT, SysML, Bond Graph, optimisation
Cours de Sûreté de fonctionnement des installations industrielles	Mastère professionnel CSSA	Sûreté de fonctionnement, diagrammes de fiabilité, analyse fonctionnelle, analyse prévisionnelle

4. Domaines de recherche:

Thèmes de recherche	Mots clés
Analyse et modélisation des systèmes de production	Systemique, analyse et modélisation, système d'information, Smart Grids
Supervision des systèmes de contrôle-commande	SCADA, Supervision, TIA portal
Interaction supervision et sûreté de fonctionnement des systèmes	Sûreté de fonctionnement, Safe-SADT, contrôle-commande

5. Autres qualifications:

Compétences	Certificats (éventuellement)
Siemens : API, TIA portal	
Matlab	
20 sim	

6. Autres activités pédagogiques/Autres activités de recherche

Dates	Activités
Depuis 2011 à ce jour	Encadrement de projets ingénieurs, de mastères de recherche et de Doctorat à l'ENICarthage
Depuis 2011 à ce jour	Participation aux jurys de Soutenances d'ingénieurs, de mastères de recherche et de Doctorat à l'ENICarthage
Depuis 2014 à ce jour	Membre de comité dans divers journaux et conférences internationales

7. Affiliation à des associations/groupements professionnels :

Dates	Associations/groupements professionnels	Fonction
Depuis 2010 à ce jour	Membre de IEEE Tunisia Section	Senior Member (n°90834968)
Depuis 2012 à ce jour	IEEE ENICarthage SB	Counselor
Depuis 2014 à ce jour	Laboratoire de Recherche Electricité Intelligente & TIC, EITIC, LR18ES44, ENICarthage	Membre
Depuis 2017 à ce jour	Association des Sciences et Technologies Electriques, ENICarthage	Membre

8. Langues : (bon, moyen, passable)

Langue	Lu	Parlé	Écrit
Arabe	Bon	Bon	Bon
Français	Bon	Bon	Bon
Anglais	Bon	Bon	Bon

9. Publications: (Les plus pertinentes)

Publications au sein de l'L.R EI&TIC de l'ENICarthage (après mars 2017) : 29 articles publiés et 26 communications dans des conférences nationales et internationales.

Articles publiés au grade de Maître de Conférences

2022

- [RI.1] R. Glaa, F. Tadeo, M.N. Lakhoua, L. El Amraoui, Modeling and simulation of building energy consumption, *Independent Journal of Management and Production*, Volume 13, Issue 5, 2022 [Clarivate, ESCI].
- [RI.2] M.N. Lakhoua, J. Ben Salem, M.F. Karoui, System Analysis and Information System Development of a Smart Grid, *Independent Journal of Management and Production*, Volume 13, Issue 5, 2022 [Clarivate, ESCI].
- [RI.3] A. Balti, M.N. Lakhoua, E-learning Systems for Teaching Industrial Automatism, *Independent Journal of Management and Production*, Volume 13, Issue 1, 2022 [Clarivate, ESCI].
- [RI.4] A. Balti, M.N. Lakhoua, M. Sayedi, Fingerprint Identification and Classification based on Leaned SVD Features and Invariants Moments, *Independent Journal of Management and Production*, à paraître [Clarivate, ESCI].
- [RI.5] A. Lachab, M.N. Lakhoua, L. El Amraoui, Design and Analysis of Novel Linear Switched Reluctance Actuator Performances Including End Effects, *Independent Journal of Management and Production*, à paraître [Clarivate, ESCI].
- [RI.6] J. El Khaldi, L. Bousslimi, A. Balti, M.N. Lakhoua, Study and analysis of the methods of the enterprise modelling, *Design Engineering*, 2022, Issue: 1, pp: 2945 – 2948 [Scopus, Elsevier].
- [RI.7] M.N. Lakhoua, J. Ben Salem, T. Battikh, I. Jabri, Using System Approach for Automation and Information System Development of a Printing System, *Journal of Computer Science and Control Systems*, Vol.15, N°1, 2022 [EBSCO, DOAJ, ProQuest...].

2021

- [RI.8] J. Ben Salem, M.N. Lakhoua, Modeling Methodology for a Complex System Applied to a Speed Measurement Operation for Internal Combustion Engines for Automotive Use, *Arabian Journal for Science and Engineering*, ISSN: 1319-8025, Springer Publishing, Vol.46, pages1499–1509, [Thomson Reuters, Impact Factor: 2.807].
- [RI.9] M.F. Karoui, M.N. Lakhoua, Application of System Analysis and Preventive Maintenance on Cigarette Packer Line, *Independent Journal of Management and Production*, Volume 12, Issue 2, 2021 [Clarivate, ESCI].
- [RI.10] J. El Khaldi, L. Bousslimi, H. Warteni, M.N. Lakhoua, Overview on modeling and management of Smart Grids, *Independent Journal of Management and Production*, Volume 12, Issue 5, 2021 [Clarivate, ESCI].
- [RI.11] I. Jemmali, M.N. Lakhoua, I. Jabri, M. Djemali, M. Annabi, Identification of the behavioral criteria of dairy cattle on the basis of electronic imaging, *Independent Journal of Management and Production*, Volume 12, Issue 7, 2021 [Clarivate, ESCI].

[RI.12] H. Wertani, J. Ben Salem, M.N. Lakhoua, Contribution to the systemic modeling of photovoltaic devices, *Independent Journal of Management and Production*, Volume 12, Issue 8, 2021 [[Clarivate](#), [ESCI](#)].

[RI.13] M.N. Lakhoua, J. Ben Salem, T. Battikh, I. Jabri, Agricultural engineering based on system analysis and electronic imaging, *Independent Journal of Management and Production*, Volume 12, Issue 8, 2021 [[Clarivate](#), [ESCI](#)].

2020

[RI.15] H. Wertani, J. Ben Salem, M.N. Lakhoua, Analysis and supervision of a smart grid system with a systemic tool, *The Electricity Journal*, Vol.33, Issue 6, July 2020. [[Scopus](#), [Elsevier](#)].

[RI.16] M.N. Lakhoua, J. Ben Salem, T. Battikh, I. Jabri., Review on Modeling and Design of Mechatronic Systems, *International Journal of Mechatronics and Automation*, vol.7, No.2, 2020 [[Scopus](#), [Elsevier](#)].

[RI.17] H. Wertani, J. Ben Salem, M.N. Lakhoua, Application of Bond Graph of Renewable Energy Sources in Smart Grids, *Journal of Electrical and Electronics Engineering*, vol.3, May 2020 [[Scopus](#), [Elsevier](#)].

2019

[RI.18] M.F. Karoui, M.N. Lakhoua, Methodology of Modeling and Supervision for Mechatronic Systems, *Journal of Computer Science and Control Systems*, Vol.12, N°1, 2019 [[EBSCO](#), [DOAJ](#), [ProQuest...](#)].

[RI.19] M.N. Lakhoua, M.F. Karoui, Monitoring of a Production System based on Functional and Dysfunctional Analysis, *Journal of Computer Science and Control Systems*, Vol.12, N°1, 2019 [[EBSCO](#), [DOAJ](#), [ProQuest...](#)].

[RI.20] M.N. Lakhoua, T. Battikh, I. Jabri, Study of a Weighing System in order to Manage a Grain Silo, *Journal of Computer Science and Control Systems*, Vol.12, N°2, 2019 [[EBSCO](#), [DOAJ](#), [ProQuest...](#)].

[RI.21] M.F. Karoui, M.N. Lakhoua, Modeling a Numerically Controlled Machine Tool For Integrated Supervision Design, *International Journal of Information Technology and Electrical Engineering*, Vol.8, N°6, 2019 [[EBSCO](#), [DOAJ](#),...].

[RI.22] M.N. Lakhoua, Analysis and Management of a Grain Storage System, *International Journal of Information Technology and Electrical Engineering*, Vol.8, N°2, 2019 [[EBSCO](#), [DOAJ](#)...].

[RI.23] M.N. Lakhoua, Application of system analysis in order to monitor grain silos, *Journal of Engineering Studies and Research* – Volume 25 (2019) No. 4 3 [[EBSCO](#), [DOAJ](#)...].

[RI.24] M.N. Lakhoua, Methodology of Analysis based on a Lean-Management, *Acta Technica Corviniensis - Bulletin of Engineering*, Fascicule 3, 2019 [[EBSCO](#), [DOAJ](#),...].

[RI.25] M.N Lakhoua, T. Battikh, I. Jabri., Using System Modeling and Specification Methods, *Acta Technica Corviniensis - Bulletin of Engineering*, Fascicule 4 , 2019 [EBSCO, DOAJ,...].

2018

[RI.26] M.N. Lakhoua, The Need for systemic analysis and design methodology of the medical equipments, *International Journal of Applied Systemic Studies*, ISSN: 1751-0589, Inderscience, Vol.8, N°1, 2018 [Scopus, Elsevier].

[RI.27] A. Soltani, T. Battikh, I. Jabri, M.N. Lakhoua, A new expert system based on fuzzy logic and image processing algorithms for early glaucoma diagnosis, *Biomedical Signal Processing and Control*, Vol. 40, February 2018, pp. 366–377. [Thomson Reuters, Impact Factor: 5.076]

2017

[RI.28] R. Glaa, N. Jeddi, M.N. Lakhoua, L. El Amraoui, Application of system modeling and simulation of the photovoltaic production, *Advances in Science and Technology Research Journal*, Vol.11. Issue 3, 2017 [Thomson Reuters Index].

[RI.29] J. Ben Salem, M.N. Lakhoua, L. El Amraoui, Modeling of Dynamical System Piloted by Discrete Subsystem Based on Bond Graph Approach, *International Journal of Electrical and Computer Engineering*, Vol. 7, N°5: October 2017 [Scopus, Elsevier].

Communications publiées au grade de Maître de Conférences

2022

[CI.2] J. Ben Salem, M.F. Karoui, M.N. Lakhoua, Proposal of a Methodology for Modeling and Supervision of Mechatronic Systems, IEEE 9th International Conference SETIT, 2022 [IEEE Xplore].

[CI.3] J. El Khaldi, L. Bouslimi, M.N. Lakhoua, Study of Using Renewable Energies in Smart Grids, IEEE 9th International Conference SETIT, 2022.

[CI.4] A. Balti, M.M. Ben Khelifa, S. Ben Hassine, H-A. Ouazaa, S. Abid, M. N Lakhoua, M. Sayadi, Gait Analysis and Detection of Human Pose Diseases, 2022 8th International Conference on Control, Decision and Information Technologies (CoDIT) [IEEE Xplore].

[CI.5] Y. Mlouhi, L. Maalej, M.N. Lakhoua, I. Jabri, T. Battikh, Augmented reality and image processing solutions for sport events and training, IEEE International Conference on Information Technologies and Smart Industrial Systems ITSIS'2022, July 15-17 2022, Paris, France [IEEE Xplore].

[CI.6] Y. Mlouhi, L. Maalej, M.N. Lakhoua, I. Jabri, T. Battikh, Localization for PMTTA algorithm at sport events: from concept to application, IEEE International Conference on Information Technologies and Smart Industrial Systems ITSIS'2022, July 15-17 2022, Paris, France [IEEE Xplore].

[CI.7] M.N. Lakhoua, J. Ben Salem, Y. Mlouhi, L. Maalej, I. Jabri, T. Battikh, Synthesis of a Methodology of System Analysis and Automation for a Grain Silo, IEEE International

Conference on Information Technologies and Smart Industrial Systems ITSIS'2022, July 15-17 2022, Paris, France [[IEEE Xplore](#)].

[CI.8] M.N. Lakhoua, F. Khanchel, Y. Mlouhi, L. Maalej, I. Jabri, T. Battikh, Overview of Analysis and Monitoring in Smart Hospital Systems, IEEE International Conference on Information Technologies and Smart Industrial Systems ITSIS'2022, July 15-17 2022, Paris, France [[IEEE Xplore](#)].

[CI.9] J. El Khaldi, L. Bouslimi, A. Balti, M.N. Lakhoua, Study and Analysis of the Methods of the Enterprise Modelling, 4th International Conference on Engineering Science and Technology (ICEST2022), 16th-17th of February, Luxor, Egypt, 2022 [published in Journal Design Engineering].

[CI.10] O. Khorchani, M.N. Lakhoua, MF. Karoui, Proposal of a Methodology of System Analysis and Information System Development of a Smart Grid, International Renewable Energy Congress (IREC 2022), December 13-15, Hammamet, Tunisia.

2020

[CI.12] M.F. Karoui, Aljouni H., Wertani H., Jemal M., M.N. Lakhoua, Methodology of System Analysis and Monitoring of Wind Power Plant, 6th IEEE International Energy Conference (ENERGYCon), 28 Sept. - 1st Oct. 2020. [[IEEE Xplore](#)].

2019

[CI.13] J. El Khaldi, L. Bouslimi, M.N. Lakhoua, Using Analysis and Modeling Methods in Smart Grids, TJASSST, 2019, Sousse, Tunisia.

[CI.14] J. El Khaldi, L. Bouslimi, M.N. Lakhoua, Modeling methodology and optimal management of a smart grid, JDEPT 2019, Tunis, Tunisia.

2018

[CI.15] J. Ben Salem, M.N. Lakhoua, L. El Amraoui, Behavioral study of a multi-input dynamic system by Bond Graph approach, IC-ASET2018 [[IEEE Xplore](#)].

[CI.16] Y. Mlouhi, T. Battikh, M.N. Lakhoua, L. Maalej, I. Jabri, Approach for Data Acquisition Based on the Homogeneity of the Playing Field, AMSE2018, June 24-25, 2018, Xi'an, China.

[CI.17] M.N. Lakhoua, H. Wertani, Overview of Conceptual Modeling for Complex Systems, CMSAM 2018, Wuhan China, September 27-28, 2018. [Proceedings is published on the Journal of DEStech Transactions on Computer Science and Engineering].

[CI.18] M.N. Lakhoua, Cyber Security of SCADA Network in Thermal Power Plants, SmartNets2018, Hammamet Tunisia, November 15-17 2018 [[IEEE Xplore](#)].

[CI.19] H. Wertani, M.N. Lakhoua, Overview of Smart Grids Architecture and Design, SmartNets2018, Hammamet Tunisia, November 15-17 2018 [[IEEE Xplore](#)].

2017

[CI.20] R. Glaa, M.N. Lakhoua, L. El Amraoui, Analysis and System Modeling of a Smart Grid: Case Study of the Operations Domain, GECS'2017, Hammamet, 23-25 March 2017. [IEEE Xplore].

[CI.21] K. Nasraoui, M.N. Lakhoua, L. El Amraoui, Study and Analysis of Micro Smart Grid Using The Modeling Language SysML, GECS'2017, Hammamet, 23-25 March 2017. [IEEE Xplore].

10. Liens personnels (Google scholar (**Obligatoire**), scopus, web of science, ORCID,...)

Google Scholar: <http://scholar.google.com/citations?hl=en&user=--16LSUAAA AJ>

Scopus: <http://www.scopus.com/authid/detail.url?authorId=34881826600>

ORCID: <https://orcid.org/0000-0002-8930-7820>

Web of Science ResearcherID: <http://www.researcherid.com/rid/E-3721-2013>

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