

Curriculum Vitae

Dr. Rafik MAHDAOUI

Lecturer (A)

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ETATVSIVIL

Name : MAHDAOUI
 First name: Rafik
 Date of birth: 01/09/1978has:Djellal-
 Nationality: Khenchela ALGERIAN
 Sex: Male
 Family situation: Married, 4 children
 Address: 141 cited El Kahina (40000) Khenchela – Algeria.
 Address Department of Mathematics and Computer Science, Faculty of Science and
 professional Technology, University of Khenchela, Algeria.
 Academic title: University Accreditation in Industrial Engineering. <https://scholar.google.fr/citations?user=eGVjhsIAAAJ&hl=fr> https://www.researchgate.net/profile/Rafik_Mahdaoui

TRAINING

- 2019 HABILITATIONUNIVERSITY INGENIEINDUSTRIAL,
 Defended on 09.26.2019 and the diploma was delivered on 09.30.2019.
 University of Batna2.
- 2013 DOCTORATE IN SCIENCE INGENIEINDUSTRIAL,
 : "Contribution to the dynamic monitoring of evolving production systems using Temporal
 Neuro-Fuzzy systems.
 Mention :Very honorable.
 Supervisor :Pr. Leila Hayet MOUSS – University of Batna
- 2008 MACT IN Industrial Engineering, obtained at the University of Batna
 Title : "Industrial diagnosis by neuro-fuzzy -Application to a production system".
 Mention :GOOD.
 Framer:Pr. Leila Hayet MOUSS – University of Batna
- 2001 INGENIORATE ININFORMATICS,obtained at the University of Batna Title :
 "Managing a knowledge-based production system. Option :
 Hardware and Software
 Framer:Prof. Mohamed Djamel MOUSS – University of Batna.
 Mention :GOOD
- 1996 BACCALAUREATE INSNATURE AND LIFE SCIENCES,obtained at Lycée Bilal
 ben Rabah- Chechar- Khenchela.
 Mention :Pretty good.

PROFESSIONAL ACTIVITIES

- 2019 Lecturer (A),Department of Mathematics and Computer Science,
 University of Abbes Laghrour-Khenchela.
- 2013 Lecturer (B),Department of Mathematics and Computer Science,
 University of Abbes Laghrour-Khenchela.
- 2011 Assistant Master (A),Department of Mathematics and Computer Science, University of
 Abbes Laghrour-Khenchela.
- 2010 Assistant Master (B) Holder,Department of Mathematics and Computer Science,
 University of Abbes Laghrour-Khenchela.
- 2005- Part-time teacher,Department of Computer Science, University Center-
 2008 Khenchela

EDUCATIONAL AND ADMINISTRATIVE RESPONSIBILITIES

- From 2020 Member of the National Equivalence Commission foreign higher education diplomas.
- October 2022- this day Member of the scientific council from the Faculty of Science and Technology, Abbès Laghrour Khenchela University
- From 2016 Member of the Scientific Committee from the Department of Mathematics and Computer Science, University of Abbes Laghrour Khenchela
- From 2016 Member of the Disciplinary Council of Department of Mathematics and Computer Science, University of Abbes Laghrour Khenchela
- January 2017- April 2017 Head of the M1 specialty Software Engineering and Distributed Systems
- 2014-2015 Deputy head of department in charge of teaching of Mathematics and Computer Science, University of Abbes Laghrour Khenchela
- March 2013- October 2013 Vice Dean in charge of post-graduation and scientific research from the Faculty of Science and Technology, University of Abbes Laghrour Khenchela
- 2012 Head of L3 specialty General IT

RESEARCH ACTIVITIES

I. International publications

- 2023 H. Haouassi., R. Mahdaoui, O. Chouhal. A discrete equilibrium optimization algorithm for breast cancer diagnosis. *Intelligent Data Analysis*, vol. 27, no. 4, pp. 1185-1204, 2023.
- 2022 H. Haouassi., R. Mahdaoui, O. Chouhal., A. Bekhouche. An efficient classification rule generation for coronary artery disease diagnosis using a novel discrete equilibrium optimizer algorithm. *Journal of Intelligent & Fuzzy Systems*, 43(3), 2315-2331. 2022.
- 2022 H. Haouassi., R. Mahdaoui, O. Chouhal. 2022. New discrete crowd search algorithm for class association rule mining. *International Journal of Swarm Intelligence Research (IJSIR)*, 13(1), 1-21. 2022.
- 2023 H. Rahab, H. Haouassi, MEH Souidi, A. Bakhouché, R. Mahdaoui, Mr. Bekhouche. A modified binary rat swarm optimization algorithm for feature selection in Arabic sentiment analysis. *Arabian Journal for Science and Engineering*, 48(8), 10125-10152. 2023.
- 2023 H. Haouassi, A. Bekhouche, H. Rahab, R. Mahdaoui, O. Chouhal. Discreet Student

- Psychology Optimization Algorithm for the Word Sense Disambiguation Problem. Arabian Journal for Science and Engineering, 1-16. 2023.
- 2023 M. Bekhouche, H. Haouassi, A. Bakhouche, H. Rahab, R. Mahdaoui. Improved binary crocodiles hunting strategy optimization for feature selection in sentiment analysis. Journal of Intelligent & Fuzzy Systems, vol. 45, no. 1, pp. 369-389, 2023.
- 2022 H. Haouassi., E. Merah, R. Mahdaoui, TM Maarouk, O. Chouhal. A new binary grasshopper optimization algorithm for feature selection problem. Journal of King Saud University- Computer and Information Sciences, 34(2), 316-328. 2022. (Submission before authorization, appearance of the volume after authorization).
- 2022 A. Bekhouche, H. Haouassi, R. Mahdaoui, H. Rahab, M. Ladmi. ADCSA-WSD: Adapted Discrete Crow Search Algorithm for Word Sense Disambiguation. Journal of Artificial Intelligence, 36(1). 2022.
- 2021 O. Chouhal, R. Mahdaoui, LH Mouss. SOA-based distributed fault prognostic and diagnosis framework: an application for preheater cement cyclones. International Journal of Internet Manufacturing and Services, 8(1), 1-18. 2021.. (Submission before habilitation, appearance of volume after habilitation).
- 2019 R. Mahdaoui, LH Mouss, A. Haboussi, O. Chouhal, H. Houassi, TM Maarouk "A Temporal Neuro-Fuzzy System For Estimating Remaining Useful Life In Preheater Cement Cyclones", International Journal of Reliability, Quality and Safety Engineering (print): 0218-5393 | ISSN (online): 1793-6446. World Scientific Publishing Company. Doi: <https://doi.org/10.1142/S0218539319500128>.
- 2018 H. Houassi, R. Mahdaoui, TM Maarouk "PSO with crossover operator applied to feature selection problem in classification", Informatica. , flight. 42 no. 2, pp. 189-192. 2018.
- 2016 H. Houassi, TM Maarouk, R. Mahdaoui "IP Address Lookup in an IP Router Based On a Reorganized Binary Prefixes Value Tree (RBPVT)", International Journal of Computer Networks and Applications. Volume 3, Issue 1, January – February (2016).
- 2016 O. Chouhal, HL Mouss, K. Benagoune, R. Mahdaoui "A multi agent solution to distributed fault diagnosis of preheater cement cyclone, Journal of Advanced Manufacturing Systems, Vol 15, no 4, 2016. pp. 209-221 ISSN (print): 0219-6867 | ISSN (online): 1793-6896. Doi: <https://doi.org/10.1142/S0219686716500153>
- 2012 R. Mahdaoui, H. Mouss and MD Mouss, O. Chouhal. "The Temporal Neuro-Fuzzy Systems Learning Using Artificial Immune Algorithm". International Review of Mechanical Engineering (IREME). vol.4 N.1, pp 918-922, May 2012, ISSN 1970 - 8734, 2012
- 2011 R. Mahdaoui, H. Mouss and D. Mouss. "Temporal Neuro-Fuzzy systems in fault diagnosis and prognosis". International review on modeling and simulations (IREMOS). vol.4 N.1, pp 436-440, February 2011, ISSN 1974-9821, 2011.

II. International communications

- 2022 Rafik Mahdaoui, Aicha Bouhental, Ouahiba Chouhal, Hichem Haouassi and Leila hayet Mouss, A web application for faults detection of a solar water heating system in industry 4.0 context. First International Conference on Materials Science & Technology MatScienc-2022. Dec, 13 -15, 2022 khenchela, Algeria. <https://matscience2022.wixsite.com/uakh>.
- 2022 Aicha Bouhantala, Rafik Mahdaoui, Hichem Haouassi, Ouahiba Chouhal, Slimi Abderahmane, Aoun amir, Leila hayet Mouss. Remaining useful life estimation by web services composition in industry 4.0 context. International seminar in industrial engineering and applied mathematics (isieam'2022) October 23-24, 2022 in Skikda, Algeria.
- 2022 Aicha Bouhantala, Rafik Mahdaoui, Leila hayet Mouss. Towards an industry 4.0 based approach for fault detection. International seminar in industrial engineering and applied mathematics (isieam'2022) October 23-24, 2022 in Skikda, Algeria.
- 2019 Ammar Haboussi, Mahdaoui Rafik, Mouss Leila Hayet, Bettine Farid. Supervision of Clinkerization systems by Immune Systems. The third edition of the international conference of mechanics and materials icmm'2019. November 11-12 2019. <https://ocs.univ-setif.dz/icimm/icimm19>.
- 2018 R. Hamidane, LH Mouss, A. Bellarbi, R. Mahdaoui "Implementation of a preventive maintenance system, based on augmented reality. the 3rd International Conference on Pattern HASnalysis and Intelligent Systems PAIS, Tébessa October 24-25, 2018. DOI:10.1109/PAIS.2018.8598510. Publisher: IEEE
- 2017 Amar haboussi, LH Mouss, R. Mahdaoui "Industrial diagnosis by pattern recognition in the cement manufacturing process » International conference on materials and their applications, University of Khenchela, Algeria, October 29-31, 2017.
- 2015 H Houassi, R. Mahdaoui, TM Maarouk "Consultation of IP addresses in an IP router based on a reorganized binary tree" Symposium on optimization and Information Systems COSI'2015, June 1-3, 2015, Oran, Algeria.
- 2015 R. Mahdaoui, O. Chouhal, TM Maarouk, H. Houassi, LH Mouss "Temporal neuro fuzzy system for fault prognostic in manufacturing system" The 1st International Conference on Applied Automation and Industrial Diagnostics (ICAAID 2015) Djelfa on 29-30 March 2015, Algeria.
- 2010 R. Mahdaoui, H. Mouss, D. Mouss, O. Chouhal, "Learning neurofuzzy systems using digital and/or symbolic data for dynamic shape recognition: Application to industrial diagnosis", ICIEM'10 International Conference on Industrial Engineering and Manufacturing. Batna-Algeria from May 9 to 10, 2010.
- 2010 O. Kadri, H. Mouss, A. Abdelhdi, and R. Mahdaoui, "Towards an optimization of the anttreestoch algorithm", ICIEM'10 International Conference on Industrial Engineering and Manufacturing. Batna, Algeria from May 9 to 10, 2010.
- 2010 R. Mahdaoui, H. Mouss, D. Mouss, O. Chouhal, Shape recognition by ELMAN neuro-fuzzy systems: Application to the prognosis of production systems,

ICIEM'10 International Conference on Industrial Engineering and Manufacturing. Batna-
Algeria from May 9 to 10, 2010.

- 2009 R. Mahdaoui, H. Mouss, D. Mouss, O. Chouhal, Hybridization of Neuro Fuzzy systems and Tabou research for pattern recognition. ICISP'09 International Conference on Systems and Processing Information Guelma, Algeria from May 2 to 4, 2009.
- 2009 R. Mahdaoui, H. Mouss, D. Mouss, O. Chouhal, Dynamic industrial monitoring by temporal neuro-fuzzy systems: Application to a production system, ICISP'09 International Conference on Systems and Processing Information Guelma, Algeria from May 2 to 4, 2009.
- 2007 R. Mahdaoui, H. Mouss, Industrial diagnostics by neuro-fuzzy approach application to a production system, International Conference in Production, Sétif, November 3-4, 2007.

II. National communications

- 2022 Rafik Mahdaoui, Hichem Haouassi, Ouahiba Chouhal, Hichem Rahab, Abdelali Bakhouché, Leila hayet Mouss. Type 2 fuzzy logic for fault detection and diagnosis in solar heating system. 1st National Conference of Materials sciences And Engineering, (MSE'22). Hichem Haouassi, Rafik Mahdaoui, Ouahiba Chouhal. Student Academic Performance Prediction using Data Mining Techniques: A Case Study of Department of Mathematics and Computer Science at Abbas Laghrour University of Khenchela, Algeria. Third conference on informatics and applied mathematics October 21-22, 2020 / Guelma university.
- 2020

SUPERVISION ACTIVITIES

- 2023 Modeling of fault detection in an industrial system using metaheuristic approaches, Abdelhamid LAHMARI, Aouf Razki BENELHABES. M2-Software Engineering and Distributed Systems
- 2022 Modeling fault detection in an industrial system, Mourad HAFIANE kamal TAAYAT. M2-Software Engineering and Distributed Systems
- 2022 RUL estimation by composite Web services, Abderahmane SLIMI Mohamed Elamine AOUN. M2-Software Engineering and Distributed Systems
- 2022 Modeling and simulation of fault detection of an asynchronous machine, Abd Elghafour RAHALI Hemza LAOUAR. M2: Electrotechnics Specialty: Electrical Controls.
- 2022 A Web Application for industrial fault detection, Rayan MERAD Nadjah NEDJAOU. M2- Security and web technology
- 2020 Modeling And Simulation Of The Fault Detection Task In A Distributed System,

Nabil Karkar. M2-Software Engineering and Distributed Systems

2020

Modeling an industrial maintenance task in a Cloud Manufacturing environment, Karim BENSIZERARA. Adlan Bendifallah. M2-Software Engineering and Distributed Systems

11/2019

Modeling an industrial maintenance task in a Cloud Manufacturing environment, Hanane BOUALLAG. M2-Software Engineering and Distributed Systems.

