

RESUME

Identification

Name :HAOUASSI

First name :Hichem

Date and place of birth :05-15-1978 in Khirane, Algeria.

Nationality :Algerian. Such :00213 6 71 43 71 02 Email:

houassi.hichem@yahoo.fr

Scientific animation

- Since 2022:Member of the scientific committee of the Department of Mathematics and Computer Science, Abbas Laghrour Khenchela University.
- 2016 to 2020:Member of the scientific committee of the Department of Mathematics and Computer Science, Abbas Laghrour Khenchela University.
- 2006 to 2009:Member of the scientific council of the Institute of Science and Technology, Khenchela University Center.

Administrative responsibility

- Since 2022:Member of the digitization unit of Abbas Laghrour Khenchela University
- September 2016 to June 2017:Head of Department of Mathematics and Computer Science, Abbas Laghrour Khenchela University
- 2007 to 2010:Head of post-graduation and specialized post-graduation department within the post-graduation department of the Khenchela University Center.

Educational activities

Education

- Presentation methodology.
- Data warehousing and mining
- 2. Scientific writing.

- Software engineering.
- Advanced software engineering.
- Quality management.
- Object analysis and design.
- Coding and representation of information.
- Software engineering
- Programming and data structure.
- Object Oriented Programming.
- Entrepreneurship.
- Algorithmic.
- Operational research.

Course handout

- Introduction to algorithms, intended for year 1 students^{time}year Mathematics and Computer Science.
- Scientific writing, intended for year 3 studentsthyear Computer Science, ISIL specialty

Research activities

National communications

- Benkhaled Sihem, Haouassi Hichem, Hemam Mounir, A quantum particle swarm optimization approach for feature selection in the data classification, RIF2019, Abdelhamid Mehri Constantine2 University, 2019.
- Hichem Houassia and Azeddine Bilami "A Parallel Architecture for Consulting IP Routing Tables", JSIA'09. Scientific Days on Computing and its applications, April, 2009, University of 08 Mai 45, Guelma, Algeria.
- Mahdaoui Rafik, Haouassi Hichem, Chouhal Ouahiba, Rahab Hichem, Bekhouche Abdelaali and Mouss Hayet. Type 2 fuzzy logic for fault detection and diagnosis in solar heating system" MSE22, Abbas Laghrour Khenchela University, 2022

- Hichem Haouassi, Rafik Mahdaoui, Ouahiba Chouhal. Machine Learning Model for Interpretable Wind Turbine Fault Prediction using Artificial Intelligence Approach, MSE22, Abbas Laghrour Khenchela University, 2022.
- Haouassi Hichem, Mehdaoui Rafik, Chouhal Ouahiba "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" 3rd Conference on Informatics and Applied Mathematics, October 21-22, 2020, University of May 5, 1945, Guelma.
- Chouhal Ouahiba, Mahdaoui Rafik, Haouassi Hichem, Anser Bachir, Foughali Selma and Mouss Hayet "Type 2 fuzzy logic approach to fault prediction in preheater cement cyclones", 2nd Conference on Informatics and Applied Mathematics, 12-13 June 2019, University 05 May 1945, Guelma.

International communications

- Hichem Houassian and Azeddine Bilami "A Parallel Architecture for Consulting IP Routing Tables", 5th International Conference: Sciences of Electronic, Technologies of Information and Telecommunications (SETIT'09) March, 2009, Tunisia.
- Hichem Houassian and Azeddine Bilami "A parallel architecture for consulting IP addresses", CITIC'09, International Conference on Information and Communication Technologies, May, 2009, Ferhat Abbas University of Sétif.
- Mahdaoui Rafik, Hayet mouss, Ouahiba chouhal, Ouahab kadri and Hichem houassi «Dynamic Industrial Surveillance by Temporal Neuro-Fuzzy Systems: Application to a Production system » 5th International Conference: Sciences of Electronic, Technologies of Information and Telecommunications (SETIT'09) March, 2009, Tunisia.
- Hichem Houassian and Azeddine Bilami "A route search technique using a cache routing table", First International Conference on Industrial engineering & Manufacturing, May, 2010, University of Batna, Algeria.
- Hichem Houassian and Azeddine Bilami "Route search in a router by cache table", Symposium on Optimization and Information Systems, April 2010, University of Ouargla, Algeria.
- Hichem Houassian and Azeddine Bilami "IP address lookup for Internet routers using cache routing table", E-Medisys 2010 Third International Conference: E-Medical Systems, May, 2010, Morocco.

- Houassi Hichem, Mahdaoui Rafik, Marouk Toufik Mesaaoud, "Consultation of IP addresses in an IP router based on a reorganized binary tree", Symposium on Optimization and Information Systems, May 2015, University of Oran, Algeria.
- Mahdaoui Rafik, Chouhal Ouahiba, Marouk Toufik Mesaaoud, Houassi Hichem, Leila Hayet Mouss, "Temporal Neuro Fuzzy System for Fault Prognostic in Manufacturing System" International Conference on Applied Automation and industrial Diagnostic (ICAAID 2015)
- Amine, D., Hichem, H., & Soumia, Z. (2022, October). Binary Archimedes Optimization Algorithm based Feature Selection for Regression Problem. In 2022 4th International Conference on Pattern Analysis and Intelligent Systems (PAIS) (pp. 1-7). IEEE. DOI:10.1109/PAIS56586.2022.9946903
- 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, 2nd International seminar on industrial engineering and applied mathematics, University of Skikda, Algeria, October 23 & 34, 2022.
- Rafik Mahdaoui, Aicha Bouhantala, Ouahiba chouhal, Hichem Haoalsoand Leail hayet Mouss, A web application for faults detection of a solar water heating system in industry 4.0 context, 1st international conference on Materials Sciences And Technology, University Abbas Laghrour, Khenchela,, 2022. (MatScience-2022) <https://matscience2022.wixsite.com/uakh>
- Chouaib Maarouk, Hichem Haouassi, Karima Saidi, Hybrid Gray Wolf Optimizer and Elitism Genetic Algorithm for Multi-objective IoT Service Placement in Fog Computing, First international conference on advances in electrical and computer engineering ICAECE 2023, University of Tebessa, Algeria. May 2023.

International publications

- Hichem Houassian and Azeddine Bilami "A Parallel Architecture for Consulting IP Routing Tables", 5th International Conference: Sciences of Electronic, Technologies of Information and Telecommunications (SETIT'09) March, 2009, Tunisia.
- Hichem Houassian and Azeddine Bilami "A parallel architecture for consulting IP addresses", CITIC'09, International Conference on Information and Communication Technologies, May, 2009, Ferhat Abbas University of Sétif.
- Mahdaoui Rafik, Hayet mouss, Ouahiba chouhal, Ouahab kadri and Hichem houassi «Dynamic Industrial Surveillance by Temporal Neuro-Fuzzy Systems: Application to a Production system » 5th International Conference: Sciences of Electronic, Technologies of Information and Telecommunications (SETIT'09) March, 2009, Tunisia.

- Hichem Houassian and Azeddine Bilami "A route search technique using a cache routing table", First International Conference on Industrial engineering & Manufacturing, May, 2010, University of Batna, Algeria.
- Hichem Houassian and Azeddine Bilami "Route search in a router by cache table", Symposium on Optimization and Information Systems, April 2010, University of Ouargla, Algeria.
- Hichem Houassian and Azeddine Bilami "IP address lookup for Internet routers using cache routing table", E-Medisys 2010 Third International Conference: E-Medical Systems, May, 2010, Morocco.
- Houassi Hichem, Mahdaoui Rafik, Marouk Toufik Mesaaoud, "Consultation of IP addresses in an IP router based on a reorganized binary tree", Symposium on Optimization and Information Systems, May 2015, University of Oran, Algeria.
- Mahdaoui Rafik, Chouhal Ouahiba, Marouk Toufik Mesaaoud, Houassi Hichem, Leila Hayet Mouss, "Temporal Neuro Fuzzy System for Fault Prognostic in Manufacturing System" International Conference on Applied Automation and industrial Diagnostic (ICAAID 2015)
- Boussalem, M., Aitouche, S., Hamouma, M., Haouassi, H., Rahab, H., & Bekhouche, A. (2023). BBMA-MDS: Binary Biology Migration Algorithm for Multi-Document Text Summarization. *Journal of Artificial Intelligence*, 37(5). <https://doi.org/10.18280/ria.370506>
- Haouassi, H., Bekhouche, A., Rahab, H. et al. Discrete Student Psychology Optimization Algorithm for the Word Sense Disambiguation Problem. *Arab J Sci Eng* (2023). <https://doi.org/10.1007/s13369-023-07993-5>.
- Bekhouche, M., Haouassi, H., Bakhouch, A., Rahab, H., & Mahdaoui, R. Improved binary crocodiles hunting strategy optimization for feature selection in sentiment analysis. *Journal of Intelligent & Fuzzy Systems*, (Preprint), 1-21. (2023).
- Rahab, H., Haouassi, H. & Laouid, A. Rule-Based Arabic Sentiment Analysis using Binary Equilibrium Optimization Algorithm. *Arab J Sci Eng* 48, 2359–2374 (2023).
- Rahab, H., Haouassi, H., Souidi, MEH et al. A Modified Binary Rat Swarm Optimization Algorithm for Feature Selection in Arabic Sentiment Analysis. *Arab J Sci Eng* (2022). <https://doi.org/10.1007/s13369-022-07466-1>
- Mohammed El Habib Souidi, Hichem Houassi, Makhoul Ledmi, Toufik Messaoud Maarouk, Abdeldjalil Ledmi, A Discrete Particle Swarm Optimization coalition training algorithm for Multi-Pursuer Multi-Evader Game. *Journal of Intelligent & Fuzzy Systems*, 2022
- Abdelaali Bekhouche, Hichem Haouassi, Mahdaoui Rafik, Hichem Rahab, Makhoul Ledmi. (2022). ADCSA-WSD: Adapted discrete crowd search algorithm for word sense disambiguation. *Journal of Artificial Intelligence*, Vol. 36, No. 1, pp. 131-138.
- Haouassi, H., Mahdaoui, R., Chouhal, O., & Bekhouche, A. (2022). 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.
- Hichem, H., Rafik, M., & Ouahiba, C. (2022). New discrete crowd search algorithm for class association rule mining. *International Journal of Swarm Intelligence Research (IJSIR)*, 13(1), 1-21.
 - Malik, MM, & Haouassi, H. (2022). Efficient sequential covering strategy for classification rules mining using a discrete equilibrium optimization algorithm. *Journal of King Saud University-Computer and Information Sciences*, 34(9), 7559-7569.
 - LEDMI Makhoulf, MOUMEN Hamouma, SIAM Abderrahim, Hichem HAOUASSI. A Discrete Crow Search Algorithm for Mining Quantitative Association Rules. *International Journal of Swarm Intelligence Research (IJSIR)*, 2021, vol. 12, no. 4, p. 101-124.
 - Hichem, H., Elkamel, M., Rafik, M., Mesaaoud, MT, & Ouahiba, C. (2022). A new binary grasshopper optimization algorithm for feature selection problem. *Journal of King Saud University-Computer and Information Sciences*, 34(2), 316-328.
 - Hichem Haouassi, RAFIK Mahdaoui, and OUAHIBA Chouhal. A discrete equilibrium optimization algorithm for breast cancer diagnosis. *Intelligent Data Analysis*, 2023, vol. 27, no. 4, pp. 1185-1204, 2023

Chapter of a book

- Toufik Mesaaoud Maarouk, Saidouni Djamel eddine, Rafik Mahdaoui and Houassi Hichem, "Interpretation of DD-LOTUS specification by C-DATA*", in the book: *New trends in databases and information systems*, Springer 2015. ISBN: 978-3-319-23201-0

Participation in research projects

- 2020 to 2023: PRFU project leader "New approaches to artificial intelligence, combinatorial optimization, machine learning and data mining for the analysis, management and mining of large databases.

Project approved from 01/01/2020.

- 2019 to 2021: Member of the PRFU project entitled "Modeling, implementation and securing industrial maintenance tasks in a cloud manufacturing environment".

Project approved from 01/01/2019.

- 2011-2013: Member of the CNEPRU project entitled "Artificial intelligence, bio-inspired methods, NICT and emergence methods: tools for the supervision and maintenance of production systems"