

CV Mohamed YOUSSEFI

YOUSSEFI Mohamed

Tel. 212 6 61 32 68 37, Email : m.youssfi@enset-media.ac.ma

Date de naissance : 10/07/1970, Marié, 2 enfants

Fonction actuelle :

- Enseignant Chercheur à L'ENSET Mohammedia, Université Hassan II de Casablanca, Spécialité Informatique : Ingénierie Logicielle, Systèmes parallèles et Distribués
- Directeur du Laboratoire de recherche : Informatique, Intelligence Artificielle et Cyber Sécurité
- Consultant et Expert en Ingénierie Logicielle, Systèmes Distribués, Développement Web et Mobile et Intelligence Artificielle
- Expert CNRST, R&D, ANEAQ, UGF UM6P



Profile :

- Scopus : <https://www.scopus.com/authid/detail.uri?authorId=36171388900>
- ORCID: <https://orcid.org/0000-0003-2842-9880>
- Researchgate : http://www.researchgate.net/profile/Youssfi_Mohamed/publications
- Chaîne vidéo : <http://youtube.com/mohamedYousfi>
- LinkedIn : <https://www.linkedin.com/in/mohamed-youssfi-3ab0811b/>
- Supports : <http://slideshare.net/mohamedYoussfi9>

Diplômes :

- **Doctorat d'Etat**, Fac des sciences Rabat (Lab. Signaux Systèmes Distribués et Intelligence Artificielle de ENSET), Spécialité Informatique et Systèmes Parallèles et Distribuées, 2015
- **Doctorat de Troisième cycle**, Fac des sciences Rabat, 1996
- Diplôme des Etudes Approfondies à la fac des sciences de Rabat, 1994
- Diplôme de Professeur Second Cycle de l'ENSET Mohammedia (Bac + 4), 1993

Certifications Professionnelles récentes :

- MIT-IDSS : DATA SCIENCE AND MACHINE LEARNING: MAKING DATA-DRIVEN DECISIONS, <https://olympus1.mygreatlearning.com/certificate/DIISWPSV>
- Generative AI for Business with Azure OpenAI
- Generative AI for Natural Language Processing
- Advanced Tableau Data Analyst Certification
- IBM: Application Security Analyst Mastery Award
- IBM: Mobile Application Developer Academic Certificate

Expérience Professionnelle :

- Enseignant Chercheur Permanent, Spécialité Informatique, Ingénierie Logicielle, Systèmes Parallèles et Distribués, Big Data et Cloud Computing et Intelligence Artificielle, à l'ENSET, Université Hassan II de Casablanca (Depuis 1993)
- Directeur du Laboratoire de recherche : Informatique Intelligence Artificielle et Cyber sécurité
- Expert CNRST (Centre National pour la Recherche Scientifique et Technique)
- Expert ANEAQ (Agence Nationale d'Évaluation et d'Assurance Qualité de l'Enseignement Supérieur et de la Recherche)
- Expert Association Professionnelle R&D
- Expert d'évaluation des projets de recherche et des filières de l'Université Hassan II de Casablanca
- Membre du conseil d'établissement ENSET (Depuis 2010)
- Membre du conseil de l'université Hassan II de Casablanca (Depuis 2013)
- Responsable de la filière d'ingénieur d'état et Master : Ingénierie Informatique, Big data et Cloud Computing à l'ENSET

Profiles :

- Chaine Youtube : <https://www.youtube.com/mohamedYoussfi>
- LinkedIn : <https://www.linkedin.com/in/mohamed-youssfi-3ab0811b>
- Scopus (Recherche) : <https://www.scopus.com/authid/detail.uri?authorId=36171388900>

Quelques Projets de Recherche :

- Projet Européen H2020 : Cyber-Physical Systems for PEdagogical Rehabilitation in Special Education (<https://cordis.europa.eu/project/id/777720>)
- Projet CNRST : Système intelligent Mobile de suivi de la pandémie COVID19 : Automatisation et Optimisation du processus de contrôle de la distanciation sociale pendant et après la période de confinement.

Expériences Relative à la formation :

- **Formations Académiques :**
 - ENSET MOHAMMEDIA : Enseignant Chercheur Permanent, depuis 1993,
 - Filières formées :
 - Master : Systèmes d'Information Distribués (SID)
 - Filière d'Ingénieur : Génie du Logiciel et des Systèmes Informatiques Distribués. (GLSID)
 - Filière d'Ingénieur : Ingénierie Informatique, Big Data et Cloud Computing
 - Modules assurés : Référence
 - Technologie Web, Technologie XML,
 - POO java,
 - Développement d'applications Mobiles (Android, IONIC et Flutter)
 - Architecture Web J2EE (Servlet, JSP, JSTL, MVC, Spring Framework)
 - Frameworks J2EE (Hibernate, Spring, Struts, JSF, EJB)
 - UML, Design patterns, Ingénierie Multimédia
 - Développement Frontend Web Angular, React
 - Bases de données, Middlewares,
 - Technologies de distribution, Architectures orientée services,
 - Systèmes Multi agents, Intelligences Artificielle Distribuée
 - Architectures Micro services
 - Traitement Parallèle Distribués en Big Data
 - Ingénierie des Infrastructures Cloud
 - DevOps
 - Systèmes Parallèles et Distribués
 - Sécurité des applications Web Mobiles et Distribuées
 - Intervenant dans d'autres formations de Master délocalisés des universités françaises :
 - MASTER MIAGE Spécialité Systèmes d'informations distribuées de l'université de NANCY
 - MASTER MIAGE de l'université de TOULOUSE.
 - MASTER IGSI Ingénierie des Systèmes d'informations de l'université de TOULOUSE
 - MASTER ECOMMERCE de l'université de Bourgogne
 - MASTER Télécom et réseaux de l'université de Savoie.
 - MASTER CREMASI de l'ENSA Lyon

- **Quelques Formations professionnelle :**

- Banque Populaire Centrale : Formateur et Consultant chez l'équipe Systèmes d'Information de la Banque Populaire centrale dans les domaines suivant : UML, Java, JEE, XML, SOA, EJB, industrialisation du Génie Logiciel période, Architectes Micro-services, Sécurité des Architectures Micro-services, Event Driven Architecture
- Haute Autorité de la Communication Audiovisuelle (HACA) : Formateur et consultant chez l'équipe SI de la HACA sur la technologie Java/JEE

- **Autres expériences :**

- ENSET Mohammedia (2000-2014):
 - Développement du site web de l'ENSET : <http://enset-media.ac.ma/>
 - Développement de l'intranet de l'ENSET : <http://ent.enset-media.ac.ma>
 - Gestion des emplois de temps, Absences ...
 - Gestion des charges horaires des enseignants
 - Gestion du parc informatique
 - Gestion électronique des documents
 - Membre du conseil d'établissement (ENSET)
 - Membre du conseil d'Université Hassan II Mohammedia
 - Responsable de stages professionnels des filières SID et GLSID
 - Encadrant des thèses de doctorat dans spécialités : Calcul parallèle et Distribué, Web Sémantique, Systèmes Multi Agents, Big data et Data science
- Membre de jury de recrutement des Professeurs assistants dans différentes universités nationales (Plusieurs fois)
- Rapporteur et membre de jury de thèses de doctorat (Plusieurs fois)
- Rapporteur et membre de jury d'habilitation Universitaire (Plusieurs fois)
- Société MCI Management (1996-2000):
 - Développeur Multimédia
 - Développement d'un CD-ROM multimédia d'enseignement des mathématiques en langue arabe (IBNOU ZAIDOUN WA RRIADIATE)
 - Développement d'un CD-ROM multimédia d'apprentissage du code de la route en bilingue (arabe et français)
 - Développement des programmes multimédia d'un jeu télévisé « Tariq Assalama », diffusé par la RTM, en partenariat avec Zahra Vision et MCI management.
 - Autres Projets de Sites web et de CD-ROM Multimédia
- Autres :
 - 1994 , développement d'une application de gestion pour l'entreprise DAR TISSIR
 - 1995, Intervenant dans un séminaire à l'école d'ingénieur INSI de Tunis en Tunisie, Thème : Systèmes réels.
 - 1996, développement d'un logiciel de Conception Assistée par Ordinateur au laboratoire de l'Université de Technologie de Compiègne France.

- 1998, développement d'un CD-ROM multimédia d'initiation à la technologie au laboratoire multimédia de l'INP Toulouse, France.
- 2000, développement d'un site web et d'un cd-rom d'initiation à la technologie au laboratoire multimédia de l'INP Toulouse, France.
- 2002, Mise en place du réseau et des services Internet sous la plate forme LINUX, et développement du site web dynamique de l'ENSET Mohammedia.
- 2013 : Développement et mise en œuvre d'une application intranet de gestion des charges horaires relatives aux filières et d'aide à la prise des décisions :

Quelques publications scientifiques :

Profile Scopus : <https://www.scopus.com/authid/detail.uri?authorId=36171388900>

ORCID: <https://orcid.org/0000-0003-2842-9880>

Profile Researchgate : http://www.researchgate.net/profile/Youssfi_Mohamed/publications

A. Publication dans des journaux internationaux indexés

1. El Mehdi Ben Laoula, Omar Elfahim, Marouane El Midaoui, **Mohamed Youssfi**, Omar Bouattane, Traffic violations analysis: Identifying risky areas and common violations, *Heliyon*, Volume 9, Issue 9, 2023, e19058, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2023.e19058>. (<https://www.sciencedirect.com/science/article/pii/S2405844023062667>)
2. BEN LAOULA, El Mehdi, **Mohamed YOUSSEFI** et al. Multi-agent cloud based license plate recognition system. *International Journal of Electrical and Computer Engineering (IJECE)*, [S.I.], v. 14, n. 4, p. 4590-4601, aug. 2024. ISSN 2722-2578. Available at: <<https://ijece.iaescore.com/index.php/IJECE/article/view/35078>>. Date accessed: 27 oct. 2024. doi:[http://doi.org/10.11591/ijece.v14i4.pp4590-4601](https://doi.org/10.11591/ijece.v14i4.pp4590-4601).
3. ITRI, Bouzgarne, **Mohamed YOUSSEFI** et al. Hybrid machine learning for stock price prediction in the Moroccan banking sector. *International Journal of Electrical and Computer Engineering (IJECE)*, [S.I.], v. 14, n. 3, p. 3197-3207, june 2024. ISSN 2722-2578. Available at: <<https://ijece.iaescore.com/index.php/IJECE/article/view/33458>>. Date accessed: 27 oct. 2024. doi:[http://doi.org/10.11591/ijece.v14i3.pp3197-3207](https://doi.org/10.11591/ijece.v14i3.pp3197-3207).
4. El Mehdi Ben Laoula, Marouane Midaoui, **Mohamed Youssfi** and Omar Bouattane, "Intelligent Moroccan License Plate Recognition System Based on YOLOv5 Build with Customized Dataset" *International Journal of Advanced Computer Science and Applications(IJACSA)*, 14(6), 2023. <http://dx.doi.org/10.14569/IJACSA.2023.0140638>
5. Fatéma Zahra Benchara, **Mohamed Youssfi**, A new scalable distributed k-means algorithm based on Cloud micro-services for High-performance computing, *Parallel Computing*, Volume 101, 2021, 102736, ISSN 0167-8191, <https://doi.org/10.1016/j.parco.2020.102736>. (<https://www.sciencedirect.com/science/article/pii/S0167819120301186>)
6. Abderazzak Ammar, Omar Bouattane, **Mohamed Youssfi**, Automatic cardiac cine MRI segmentation and heart disease classification, *Computerized Medical Imaging and Graphics*, Volume 88, 2021, 101864, ISSN 0895-6111, <https://doi.org/10.1016/j.compmedimag.2021.101864>. (<https://www.sciencedirect.com/science/article/pii/S089561121000124>)
7. Fatéma Zahra Benchara, **Mohamed Youssfi**, "A New Distributed Type-2 Fuzzy Logic Method for Efficient Data Science Models of Medical Informatics", *Advances in Fuzzy Systems*, vol. 2020, Article ID 6539123, 10 pages, 2020. <https://doi.org/10.1155/2020/6539123>

8. Bousselham A., Bouattane O., **Youssfi M.**, Raihani A. (2020) 2D Brain Tumor Segmentation Based on Thermal Analysis Model Using U-Net on GPUs. In: Bhateja V., Satapathy S., Satori H. (eds) Embedded Systems and Artificial Intelligence. Advances in Intelligent Systems and Computing, vol 1076. Springer, Singapore.
https://doi.org/10.1007/978-981-15-0947-6_48
9. Bousselham A., Bouattane O., **Youssfi M.**, Raihani A. (2020) Ischemic Stroke Lesion Segmentation Based on Thermal Analysis Model Using U-Net Fully Convolutional Neural Networks on GPUs. In: Ezziyyani M. (eds) Advanced Intelligent Systems for Sustainable Development (AI2SD'2019). AI2SD 2019. Advances in Intelligent Systems and Computing, vol 1106. Springer, Cham. https://doi.org/10.1007/978-3-030-36677-3_12
10. Bousselham A., Bouattane O., **Youssfi M.**, Raihani A. (2020) Improved Brain Tumor Segmentation in MRI Images Based on Thermal Analysis Model Using U-Net and GPUs. In: Ezziyyani M. (eds) Advanced Intelligent Systems for Sustainable Development (AI2SD'2019). AI2SD 2019. Advances in Intelligent Systems and Computing, vol 1106. Springer, Cham. https://doi.org/10.1007/978-3-030-36677-3_10
11. Ait Allal A, El Amrani L, Haidine A, Mansouri K, **Youssfi M.** Implementation of 5G Communication Network for a Safe Operation of Autonomous and Conventional Ships. JERA 2020;51:229–48. <https://doi.org/10.4028/www.scientific.net/jera.51.229>
12. Ait Allal A, Melhaoui Y, Kamil A, Mansouri K, **Youssfi M.** Ship Main Engine Lubricating Oil System's Reliability Analysis by Using Bayesian Network Approach. JERA 2020;48:108–25. <https://doi.org/10.4028/www.scientific.net/jera.48.108>.
13. Ait Allal A., Mansouri K., **Youssfi M.**, Qbadou M., El Had K. (2020) Shipyard Impact Assessment for a Sustainable Ships' Maintenance and Repair Activity in West Africa. In: Ezziyyani M. (eds) Advanced Intelligent Systems for Sustainable Development (AI2SD'2019). AI2SD 2019. Advances in Intelligent Systems and Computing, vol 1104. Springer, Cham. https://doi.org/10.1007/978-3-030-36671-1_53
14. Ait Allal A., Mansouri K., **Youssfi M.**, Qbadou M., El Had K. (2020) Ship Main Engine Waste Heat Recovery for an Efficient Energy Management. In: Ezziyyani M. (eds) Advanced Intelligent Systems for Sustainable Development (AI2SD'2019). AI2SD 2019. Lecture Notes in Electrical Engineering, vol 624. Springer, Cham. https://doi.org/10.1007/978-3-030-36475-5_23
15. Fatéma Zahra Benchara and **Mohamed Youssfi**, “A Mobile Agent Team Works based on Load-Balancing Middleware for Distributed Computing Systems” International Journal of Advanced Computer Science and Applications(IJACSA), 10(12), 2019. <http://dx.doi.org/10.14569/IJACSA.2019.0101254>
16. Asmaa ROUDANE, **Mohamed YOUSSEFI** and Khalifa MANSOURI, “Semantic Micro-Services Model for Vehicle Routing using Ant Colony Optimization” International Journal of Advanced Computer Science and Applications(IJACSA), 10(11), 2019. <http://dx.doi.org/10.14569/IJACSA.2019.0101149>
17. Chougdali, S., Mansouri, K., **Youssfi, M.** Air Traffic Management system used intelligent computing (2019) ARPN Journal of Engineering and Applied Sciences, 14 (2), pp. 518-524. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061320367&partnerID=40&md5=7799d17aca5f2b41301fa777e861bc33>
18. Hajoui, Y., Bouattane, O., **Youssfi, M.**, Illoussamen, E.H. Q-learning and ACO hybridisation for real-time scheduling on heterogeneous distributed architectures(2019) International Journal of Computational Science and Engineering, 20 (2), pp. 225-239. Cited 2 times. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85076192869&doi=10.1504%2fIJCSE.2019.103826&partnerID=40&md5=40b1390db197481ab35ef407b0e2d387>. DOI: 10.1504/IJCSE.2019.103826

19. Sidi Mohamed Snineh, **Mohamed Youssfi**, Abdelaziz Daaif and Omar Bouattane, "Micro Agent and Neural Network based Model for Data Error Detection in a Real Time Data Stream" International Journal of Advanced Computer Science and Applications(IJACSA), 10(7), 2019. <http://dx.doi.org/10.14569/IJACSA.2019.0100725>
20. Ait Allal, K. Mansouri, **M. Youssfi**, M. Qbadou, Toward an evaluation of marine fuels for a clean and efficient autonomous ship propulsion energy, Materials Today: Proceedings Volume 13, Part 3, 2019, Pages 486-495, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2019.04.005>. (<https://www.sciencedirect.com/science/article/pii/S2214785319305978>)
21. Ait Allal A., Mansouri K., **Youssfi M.**, Qbadou M. (2019) Toward a Study of Environmental Impact of Shipping Industry and Proposal of Alternative Solutions. In: Ezziyyani M. (eds) Advanced Intelligent Systems for Sustainable Development (AI2SD'2018). AI2SD 2018. Advances in Intelligent Systems and Computing, vol 913. Springer, Cham. https://doi.org/10.1007/978-3-030-11881-5_21
22. Abdelmajid Bousselham, Omar Bouattane, **Mohamed Youssfi**, Abdelhadi Raihani, "Towards Reinforced Brain Tumor Segmentation on MRI Images Based on Temperature Changes on Pathologic Area", *International Journal of Biomedical Imaging*, vol. 2019, Article ID 1758948, 18 pages, 2019. <https://doi.org/10.1155/2019/1758948>
23. Badr Eddine Sabir, **Mohamed Youssfi**, Omar Bouattane, Hakim Allali, Authentication and load balancing scheme based on JSON Token For Multi-Agent Systems, Procedia Computer Science, Volume 148, 2019, Pages 562-570, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2019.01.029>. (<https://www.sciencedirect.com/science/article/pii/S1877050919300298>)
24. Allal, A.A., Kamil, A., Melhaoui, Y., Mansouri, K., **Youssfi, M.** Seawater cooling system reliability modelin for a safer autonomous ship(2019) International Journal of Mechanical and Mechatronics Engineering, 19 (6), pp. 13-26. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85084518799&partnerID=40&md5=40f2a41661dcaa7ea35eed4c38d96bad>
25. Essayah, A., **Youssfi, M.**, Bouattane, O., Mansouri, K., Illoussamen, E. QoS-based semantic micro services discovery and composition using ACO algorithm: Case study: E-learning platform (2019) International Journal of Advanced Computer Science and Applications, 10 (6), pp. 159-168. Cited 1 time. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070508981&partnerID=40&md5=1b84704fb41c580d291c18c60951e88>
26. Ait Ali, N., Cherradi, B., El Abbassi, A. **Youssfi M.** GPU fuzzy c-means algorithm implementations: performance analysis on medical image segmentation. *Multimed Tools Appl* 77, 21221–21243 (2018). <https://doi.org/10.1007/s11042-017-5589-6>
27. Chougdali, S., Mansouri, K., **Youssfi, M.**, Qbadou, M. A new approach for Aircraft Landing Scheduling problem based on the deadline monotonic algorithm (2018) ARPN Journal of Engineering and Applied Sciences, 13 (8), pp. 2720-2725. Cited 1 time. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85047560160&partnerID=40&md5=2e020c3e67410ae653f16541f0b202f9>
28. Younes Hajoui, Omar Bouattane, **Mohamed Youssfi** and Elhoecein Illoussamen, "New Hybrid Task Scheduling Algorithm with Fuzzy Logic Controller in Grid Computing" International Journal of Advanced Computer Science and Applications(IJACSA), 9(8), 2018. <http://dx.doi.org/10.14569/IJACSA.2018.090869>
29. Abdelmajid Bousselham, Omar Bouattane, **Mohamed Youssfi**, Abdelhadi Raihani, Brain tumor temperature effect extraction from MRI imaging using bioheat equation, Procedia

- Computer Science, Volume 127, 2018, Pages 336-343, ISSN 1877-0509,
<https://doi.org/10.1016/j.procs.2018.01.130>.
(<https://www.sciencedirect.com/science/article/pii/S187705091830142X>)
30. Abdelmajid Bousselham, Omar Bouattane, **Mohamed Youssfi**, Abdelhadi Raihani, 3D brain tumor localization and parameter estimation using thermographic approach on GPU, Journal of Thermal Biology, Volume 71, 2018, Pages 52-61, ISSN 0306-4565,
<https://doi.org/10.1016/j.itherbio.2017.10.014>.
(<https://www.sciencedirect.com/science/article/pii/S0306456517301869>)
31. Chougdali, S., Mansouri, K., **Youssfi, M.**, Balouki, Y. Air traffic control method in the transit aerospace based on the least laxity first algorithm (2017) ACM International Conference Proceeding Series, art. no. a25,. <https://doi.org/10.1145/3167486.3167511>
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85049648964&doi=10.1145%2f3167486.3167511&partnerID=40&md5=a0cc49b185a8a80a9557e847516d4b72>
32. Ali, N.A., Cherradi, B., El Abbassi, A., Bouattane, O., **Youssfi, M.** Modelling the behavior of the CPU and the GPU versus the clusters number variation for sequential and parallel implementations of BCFCM algorithm (2017) ARPN Journal of Engineering and Applied Sciences, 12 (21), pp. 6030-6038. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85034440528&partnerID=40&md5=493213f1783e65877c599bfb9f514eb>
33. Fakhi, H., Bouattane, O., **Youssfi, M.**, Ouajji, H. A multi-agent model for general-purpose computing on graphics processing units (2017) Multiagent and Grid Systems, 13 (3), pp. 237-252. Cited 1 time. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85031792193&doi=10.3233%2fMGS-170269&partnerID=40&md5=f96fc4c4f563c0656820541ca0f1631d>; DOI:10.3233/MGS-170269
34. Benchara, F.Z.; **Youssfi, M.**; Bouattane, O.; Ouajji, H. A New Scalable, Distributed, Fuzzy C-Means Algorithm-Based Mobile Agents Scheme for HPC: SPMD Application. *Computers* **2016**, 5, 14. <https://doi.org/10.3390/computers5030014>
35. **Mohamed Youssfi**, Omar Bouattane, Abdelaziz Daaif, Mohammed Ouadi Bensalah, [Load balancing algorithm based on aspect oriented approach for a multi agent distributed system](http://dx.doi.org/10.12988/ces.2016.512321). Contemporary Engineering Sciences, Vol. 9, 2016, no. 4, 145-161,
<http://dx.doi.org/10.12988/ces.2016.512321>

B. Communications dans les conférences internationales indexées

1. L. Aminou, A. Daaif, M. Soulami, A. Chalfaouat and **M. Youssfi**, "Converging human and algorithmic biases in the hiring decision-making process," *2024 International Conference on Intelligent Systems and Computer Vision (ISCV)*, Fez, Morocco, 2024, pp. 1-5, doi: 10.1109/ISCV60512.2024.10620077.
keywords: {Ethics;Sensitivity;Reviews;Decision making;Knowledge based systems;Training data;Human factors;artificial intelligence;hiring process;decision making;human biases;intelligent systems;algorithmic biases},
2. F. F. Zahrae, A. Es-Sâadia and **Y. Mohamed**, "Artificial Intelligence Implementation in Virtual Learning Environment: An Overview," *2024 International Conference on Intelligent Systems and Computer Vision (ISCV)*, Fez, Morocco, 2024, pp. 1-6, doi: 10.1109/ISCV60512.2024.10620135.
keywords: {Deep learning;Computer vision;Electronic learning;Pandemics;Reviews;Globalization;Virtual environments;Artificial intelligent;E-Learning;Deep learning;Adaptative learning},

3. K. Oulahyane, **M. Youssfi** and N. Benmoussa, "Embracing Metaverse Education: Transforming the Landscape of Learning," *2024 IEEE 12th International Symposium on Signal, Image, Video and Communications (ISIVC)*, Marrakech, Morocco, 2024, pp. 1-6, doi: 10.1109/ISIVC61350.2024.10577791.
keywords: {Economics;Ethics;Electronic learning;Metaverse;Reviews;Navigation;Education;Metaverse;virtual worlds;education;immersive learning;virtual classrooms},
4. F. F. Zahrae, A. Es-Sâadia and **Y. Mohamed**, "Recommendation system for E-learners: model-based collaborative filtering approach," *2024 IEEE 12th International Symposium on Signal, Image, Video and Communications (ISIVC)*, Marrakech, Morocco, 2024, pp. 1-6, doi: 10.1109/ISIVC61350.2024.10577774.
keywords: {Adaptation models;Electronic learning;Machine learning algorithms;Adaptive systems;Collaborative filtering;Collaboration;Reinforcement learning;Recommendation system;Collaborative filtering;model-based collaborative filtering;E-Learning;data mining Introduction},
5. Mouttalib, H., Tabaa, **M., Youssfi**, M. (2024). Towards a Platform for Higher Education in Virtual Reality of Engineering Sciences. In: Tabaa, M., Badir, H., Bellatreche, L., Boulmakoul, A., Lbath, A., Monteiro, F. (eds) New Technologies, Artificial Intelligence and Smart Data. INTIS INTIS 2022 2023. Communications in Computer and Information Science, vol 1728. Springer, Cham. https://doi.org/10.1007/978-3-031-47366-1_8
6. Zero-Knowledge Proofs and OAuth 2.0 for Anonymity and Security in Distributed Systems, Ayman Nait Cherif, Youssef Achir, **Mohamed Youssfi**, Mohamed Youssfi, Mouhcine Elgarej and Omar Bouattane, E3S Web of Conf., 469 (2023) 00085, DOI: <https://doi.org/10.1051/e3sconf/202346900085>
7. O. Idrissi, A. Bikir, K. Mansouri and **M. Youssfi**, "Enhancing the management of aircraft taxiing phase by allocating efficient and conflict-free routes," *2020 IEEE 2nd International Conference on Electronics, Control, Optimization and Computer Science (ICECOCS)*, 2020, pp. 1-4, doi: 10.1109/ICECOCS50124.2020.9314574.
8. M. Erraki, **M. Youssfi**, **A. Daaif** and O. Bouattane, "NLP Summarization: Abstractive Neural Headline Generation Over A News Articles Corpus," *2020 Fourth International Conference On Intelligent Computing in Data Sciences (ICDS)*, 2020, pp. 1-6, doi: 10.1109/ICDS50568.2020.9268776.
9. M. Rafik, A. Fentis, T. Khalili, **M. Youssfi** and O. Bouattane, "Learning and Predictive Energy Consumption Model based on LSTM recursive neural networks," *2020 Fourth International Conference On Intelligent Computing in Data Sciences (ICDS)*, 2020, pp. 1-7, doi: 10.1109/ICDS50568.2020.9268733.
10. Chris Lytridis, Christos Bazinas, Stamatis Chatzistamatis, Kalliopi Sotiropoulou, Aouatif Najoua, **Mohamed Youssfi**, Omar Bouattane, "Head Pose Estimation Using Lattice Computing Techniques," *2020 International Conference on Software, Telecommunications and Computer Networks (SoftCOM)*, 2020, pp. 1-5, doi: 10.23919/SoftCOM50211.2020.9238315.
11. N. E. A. Amrani, **M. Youssfi**, O. Bouattane and O. E. K. Abra, "Interoperability Between Heterogeneous Multi-agent Systems Recommended by FIPA: Towards a Weakly Coupled Approach Based on a Network of Recurrent Neurons of the LSTM type," *2020 3rd International Conference on Advanced Communication Technologies and Networking (CommNet)*, 2020, pp. 1-6, doi: 10.1109/CommNet49926.2020.9199643.
12. **M. YOUSSEFI**, O. BOUATTANE, K. Vassilis and G. Papakostas, "Generic distributed polymorphic learning model for a community of heterogeneous cyber physical social robots in MAS Environment and GPU Architecture," *2020 International Conference on Intelligent Systems and Computer Vision (ISCV)*, 2020, pp. 1-7, doi: 10.1109/ISCV49265.2020.9204226.
13. F. E. Ezrhari, H. Bensag, **M. Youssfi**, O. Bouattane and V. Kaburlasos, "Scalable multi agent system middleware for HPC of Big Data Applications," *2020 International Conference on*

- Intelligent Systems and Computer Vision (ISCV), 2020, pp. 1-8, doi: 10.1109/ISCV49265.2020.9204225.
- 14. Noureddine Ait Ali, Bouchaib Cherradi, Ahmed El Abbassi, Omar Bouattane, **Mohamed Youssfi**, Parallel Implementation and Performance Evaluation of some Supervised Clustering Algorithms for MRI Images Segmentation, Proceedings of the 4th International Conference on Big Data and Internet of ThingsOctober 2019 Article No.: 69Pages 1-7, <https://doi.org/10.1145/3372938.3373007>
 - 15. Abderazzak Ammar, Omar Bouattane, **Mohammed Youssfi**, Image segmentation with local active contours on graphics processing units, Proceedings of the 4th International Conference on Smart City ApplicationsOctober 2019 Article No.: 90Pages 1-8, <https://doi.org/10.1145/3368756.3369077>
 - 16. Y. Hajoui, O. Bouattane, **M. Youssfi** and E. Illoussamen, "Application model of tasks scheduling problem in distributed systems solving problems of road traffic planning in smart cities," 2019 Third International Conference on Intelligent Computing in Data Sciences (ICDS), 2019, pp. 1-7, doi: 10.1109/ICDS47004.2019.8942310.
 - 17. S. M. Snineh, O. Bouattane, **M. Youssfi** and A. Daaif, "Towards a multi-agents model for errors detection and correction in big data flows," 2019 Third International Conference on Intelligent Computing in Data Sciences (ICDS), 2019, pp. 1-5, doi: 10.1109/ICDS47004.2019.8942297.
 - 18. N. E. A. Amrani, O. E. K. Abra, **M. Youssfi** and O. Bouattane, "A new interpretation technique of traffic signs, based on Deep Learning and Semantic Web," 2019 Third International Conference on Intelligent Computing in Data Sciences (ICDS), 2019, pp. 1-6, doi: 10.1109/ICDS47004.2019.8942319.
 - 19. S. CHOKRI, S. BAROUD, S. BELHAOUS, M. KHOUIL, **M. Youssfi** and M. Mestari, "Impact of communication volume on the maximum speedup in Parallel computing based on graph partitioning," 2019 Third International Conference on Intelligent Computing in Data Sciences (ICDS), 2019, pp. 1-6, doi: 10.1109/ICDS47004.2019.8942349.
 - 20. C. Lytridis et al., **M. Youssfi**, "Social Robots as Cyber-Physical Actors in Entertainment and Education," 2019 International Conference on Software, Telecommunications and Computer Networks (SoftCOM), 2019, pp. 1-6, doi: 10.23919/SOFTCOM.2019.8903630.
 - 36. AMMAR, O. BOUATTANE and **M. YOUSSEFI**, "Review and comparative study of three local based active contours optimizers for image segmentation," 2019 5th International Conference on Optimization and Applications (ICOA), 2019, pp. 1-6, doi: 10.1109/ICOA.2019.8727683.
 - 21. A. ALLAL, K. MANSOURI, **M. YOUSSEFI** and M. QBADOU, "Reliable and cost-effective communication at high seas, for a safe operation of autonomous ship," 2018 6th International Conference on Wireless Networks and Mobile Communications (WINCOM), 2018, pp. 1-8, doi: 10.1109/WINCOM.2018.8629594.
 - 22. Chougdali S., Mansouri K., **Youssfi M.**, Balouki Y. (2019) New Real Time Method for Air Traffic Control Based on the Blocking Area. In: Mizera-Pietraszko J., Pichappan P., Mohamed L. (eds) Lecture Notes in Real-Time Intelligent Systems. RTIS 2017. Advances in Intelligent Systems and Computing, vol 756. Springer, Cham. https://doi.org/10.1007/978-3-319-91337-7_30
 - 23. N. El Abid Amrani, **M. Youssfi** and O. E. K. Abra, "Semantic interoperability between heterogeneous multi-agent systems based on Deep Learning," 2018 6th International Conference on Multimedia Computing and Systems (ICMCS), 2018, pp. 1-6, doi: 10.1109/ICMCS.2018.8525921.
 - 24. F. E. Ezrhari, H. Bensag, **M. Youssfi**, O. Bouattane and O. E. K. Abra, "Towards a New Micro Agents Middleware for Massively Distributed Systems," 2018 6th International Conference on Multimedia Computing and Systems (ICMCS), 2018, pp. 1-6, doi: 10.1109/ICMCS.2018.8525960.
 - 25. S. M. Snineh, **M. YOUSSEFI**, O. BOUATTANE, A. Daaif and O. E. K. ABRA, "Real-time management model for frequent Big Data errors : Automatic Clean Repository For Big Data (ACR)," 2018 6th International Conference on Multimedia Computing and Systems (ICMCS), 2018, pp. 1-6, doi: 10.1109/ICMCS.2018.8525920.

26. M. Magri, A. Raihani, A. E. Magri, A. E. Fadili and **M. E. Youssfi**, "Aerodynamic design and 3D analysis of wind turbine rotor," 2018 Renewable Energies, Power Systems & Green Inclusive Economy (REPS-GIE), 2018, pp. 1-6, doi: 10.1109/REPSGIE.2018.8488829.
27. A. Allal, K. Mansouri, **M. Youssfi** and M. Qbadou, "Toward energy saving and environmental protection by implementation of autonomous ship," 2018 19th IEEE Mediterranean Electrotechnical Conference (MELECON), 2018, pp. 177-180, doi: 10.1109/MELCON.2018.8379089.
28. A. Allal, K. Mansouri, **M. Youssfi** and M. Qbadou, "Toward a review of innovative solutions in the ship design and performance management for energy-saving and environmental protection," 2018 19th IEEE Mediterranean Electrotechnical Conference (MELECON), 2018, pp. 115-118, doi: 10.1109/MELCON.2018.8379078.
29. Bousselham, O. Bouattane, **M. Youssfi** and A. Raihani, "Thermal influence of brain tumor on MRI images with anisotropic properties," 2018 4th International Conference on Optimization and Applications (ICOA), 2018, pp. 1-5, doi: 10.1109/ICOA.2018.8370545.
30. Samadi, E. F. Hanaa, M. Qbadou, **M. Youssfi** and F. Akef, "A syntactic and semantic multi-agent based question answering system for collaborative e-learning," 2018 4th International Conference on Optimization and Applications (ICOA), 2018, pp. 1-4, doi: 10.1109/ICOA.2018.8370588.
31. Bousselham, O. Bouattane, **M. Youssfi** and A. Raihani, "Thermal effect analysis of brain tumor on simulated T1-weighted MRI images," 2018 International Conference on Intelligent Systems and Computer Vision (ISCV), 2018, pp. 1-6, doi: 10.1109/ISCV.2018.8354083.
32. A. Allal, K. Mansouri, **M. Youssfi** and M. Qbadou, "Toward a reliable main engine lubricating oil system for a safe operation of autonomous ship," 2017 2nd International Conference on System Reliability and Safety (ICSRs), 2017, pp. 391-399, doi: 10.1109/ICSRs.2017.8272854.
33. A. Allal, K. Mansouri, M. Qbadou and **M. Youssfi**, "Task human reliability analysis for a safe operation of autonomous ship," 2017 2nd International Conference on System Reliability and Safety (ICSRs), 2017, pp. 74-81, doi: 10.1109/ICSRs.2017.8272800.
34. Serrar O., el Kheir Abra O., **Youssfi M.**, Tamtaoui A. (2018) Robust Video Coding Based on Perceptual Unequal Protection. In: Noreddine G., Kacprzyk J. (eds) International Conference on Information Technology and Communication Systems. ITCS 2017. Advances in Intelligent Systems and Computing, vol 640. Springer, Cham. https://doi.org/10.1007/978-3-319-64719-7_29
35. N. A. Ali, B. Cherradi, A. El Abbassi, O. Bouattane and **M. Youssfi**, "New parallel hybrid implementation of bias correction fuzzy C-means algorithm," 2017 International Conference on Advanced Technologies for Signal and Image Processing (AT SIP), 2017, pp. 1-6, doi: 10.1109/AT SIP.2017.8075519.
36. Daaif, O. Bouattane and **M. Youssfi**, "An efficient multi-agent computationnal model for massively distribution of independent and heterogeneous tasks," 2017 Intelligent Systems and Computer Vision (ISCV), 2017, pp. 1-7, doi: 10.1109/ISCV.2017.8054914.
37. H. Younes, O. Bouattane, **M. Youssfi** and E. Illoussamen, "New load balancing framework based on mobile AGENT and ant-colony optimization technique," 2017 Intelligent Systems and Computer Vision (ISCV), 2017, pp. 1-6, doi: 10.1109/ISCV.2017.8054961.
38. H. Fakhi, O. Bouattane, **M. Youssfi** and O. Hassan, "New optimized GPU version of the k-means algorithm for large-sized image segmentation," 2017 Intelligent Systems and Computer Vision (ISCV), 2017, pp. 1-6, doi: 10.1109/ISCV.2017.8054924.
39. Sabbani, **M. Youssfi** and O. Bouattane, "A multi-agent based on ant colony model for urban traffic management," 2016 5th International Conference on Multimedia Computing and Systems (ICMCS), 2016, pp. 793-798, doi: 10.1109/ICMCS.2016.7905551.
40. F. Z. Benchara, **M. Youssfi**, O. Bouattane and H. Ouajji, "A new efficient distributed computing middleware based on cloud micro-services for HPC," 2016 5th International Conference on Multimedia Computing and Systems (ICMCS), 2016, pp. 354-359, doi: 10.1109/ICMCS.2016.7905644.

41. A. Allal, K. Mansouri, **M. Youssfi** and M. Qbadou, "Toward a new maritime communication system in Detroit of Gibraltar where conventional and autonomous ships will co-exist," 2017 International Conference on Wireless Networks and Mobile Communications (WINCOM), 2017, pp. 1-8, doi: 10.1109/WINCOM.2017.8238198.
42. Ait Allal A., Mansouri K., **Youssfi M.**, Qbadou M. (2017) Toward Reliable Maritime Communication for a Safe Operation of Autonomous Ship. In: Sabir E., García Armada A., Ghogho M., Debbah M. (eds) Ubiquitous Networking. UNet 2017. Lecture Notes in Computer Science, vol 10542. Springer, Cham. https://doi.org/10.1007/978-3-319-68179-5_23
43. Bousselham, O. Bouattane, **M. Youssfi** and A. Raihani, "Toward an efficient brain tumor extraction using level set method and pennes bioheat equation," 2016 4th IEEE International Colloquium on Information Science and Technology (CiSt), 2016, pp. 762-767, doi: 10.1109/CIST.2016.7804989.
44. N. Aitali, B. Cherradi, A. El Abbassi, O. Bouattane and **M. Youssfi**, "GPU based implementation of spatial fuzzy c-means algorithm for image segmentation," 2016 4th IEEE International Colloquium on Information Science and Technology (CiSt), 2016, pp. 460-464, doi: 10.1109/CIST.2016.7805092.
45. H. Bensag, **M. Youssfi** and O. Bouattane, "Embedded agent for medical image segmentation," 2015 27th International Conference on Microelectronics (ICM), 2015, pp. 190-193, doi: 10.1109/ICM.2015.7438020.
46. N. Aitali, B. Cherradi, O. Bouattane, **M. Youssfi** and A. Raihani, "New fine-grained clustering algorithm on GPU architecture for bias field correction and MRI image segmentation," 2015 27th International Conference on Microelectronics (ICM), 2015, pp. 118-121, doi: 10.1109/ICM.2015.7438002.
47. F. Z. Benchara, **M. Youssfi**, O. Bouattane and H. Ouajji, "A mobile agent team works model for HPC big data analysis: Fuzzy logic application," 2015 5th International Conference on Information & Communication Technology and Accessibility (ICTA), 2015, pp. 1-6, doi: 10.1109/ICTA.2015.7426917.
48. Elgarej M., Khalifa **M.**, **Youssfi M.** (2016) Traffic Lights Optimization with Distributed Ant Colony Optimization Based on Multi-agent System. In: Abdulla P., Delporte-Gallet C. (eds) Networked Systems. NETYS 2016. Lecture Notes in Computer Science, vol 9944. Springer, Cham. https://doi.org/10.1007/978-3-319-46140-3_22
49. Benchara F.Z., **Youssfi M.**, Bouattane O., Ouajji H., Bensalah M.O. (2016) A New Distributed Computing Environment Based on Mobile Agents for SPMD Applications. In: El Oualkadi A., Choubani F., El Moussati A. (eds) Proceedings of the Mediterranean Conference on Information & Communication Technologies 2015. Lecture Notes in Electrical Engineering, vol 381. Springer, Cham. https://doi.org/10.1007/978-3-319-30298-0_37
50. Soumia CHOKRI, Sohaib BAROUD, Safa BELHAOUS, Meryem KHOUIL, **Mohammed El Youssfi**, **Mohammed Mestari**, "Impact of communication volume on the maximum speedup in Parallel computing based on graph partitioning", *Intelligent Computing in Data Sciences (ICDS) 2019 Third International Conference on*, pp. 1-6, 2019.
51. S. Chokri, S. Baroud, S. Belhaous, M. Bentaleb, M. Mestari and **M. El Youssfi**, "Heuristics for dynamic load balancing in parallel computing," 2018 4th International Conference on Optimization and Applications (ICOA), 2018, pp. 1-5, doi: 10.1109/ICOA.2018.8370587.

C. Chapitres d'ouvrages pour la période 2016-2020

1. Bousselham A., Bouattane O., **Youssfi M.**, Raihani A. (2019) An Efficient Level Set Speed Function Based on Temperature Changes for Brain Tumor Segmentation. In: Khoukhi F., Bahaj M., Ezziyyani M. (eds) Smart Data and Computational Intelligence. AIT2S 2018. Lecture Notes in Networks and Systems, vol 66. Springer, Cham. https://doi.org/10.1007/978-3-030-11914-0_13

2. Ait Allal A., Mansouri K., **Youssfi M.**, Qbadou M. (2019) Ship Operational Measures Implementation's Impact on Energy-Saving and GHG Emission. In: Ezziyyani M. (eds) Advanced Intelligent Systems for Sustainable Development (AI2SD'2018). AI2SD 2018. Advances in Intelligent Systems and Computing, vol 912. Springer, Cham. https://doi.org/10.1007/978-3-030-12065-8_28
3. Daaif, A., Bouattane, O., **Youssfi, M.**, Snineh, S.M. An Efficient Traffic Monitoring Model Using a Stream Processing Platform Based on Smart Highways Events Generator (2019) Advances in Intelligent Systems and Computing, 756, pp. 35-44. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85047365109&doi=10.1007%2f978-3-319-91337-7_4&partnerID=40&md5=04d4a6ac9504c098e0380dda7bf77be6. DOI: 10.1007/978-3-319-91337-7_4
4. **Daaif Abdelaziz**, Omar Bouattane, **Youssfi Mohamed**, Sidi Mohamed Snineh, "An Efficient Traffic Monitoring Model Using a Stream Processing Platform Based on Smart Highways Events Generator", Lecture Notes in Real-Time Intelligent Systems Smart Data and Computational Intelligence, Springer, Janvier 2019, Indexes : Scopus, Springer, https://link.springer.com/chapter/10.1007/978-3-319-91337-7_4
5. Abdelmajid Bousselham, Omar Bouattane, **Mohamed Youssfi** Abdelhadi Raihani, "An Efficient Level Set Speed Function Based on Temperature Changes for Brain Tumor Segmentation", DOI: 10.1007/978-3-030-11914-0_13, February 2019, <https://link.springer.com/book/10.1007%2F978-3-030-11914-0>
6. Sallami Chougdali, Khalifa Mansouri, **Youssfi Mohamed**, Youssef Balouki, "New Real Time Method for Air Traffic Control Based on the Blocking Area", Lecture Notes in Real-Time Intelligent Systems, Springer DOI: 10.1007/978-3-319-91337-7_30, January 2019, Scopus, https://link.springer.com/chapter/10.1007/978-3-319-91337-7_30
7. Elgarej Mouhcine, Khalifa Mansouri, **Youssfi Mohamed**, "Intelligent Vehicle Routing System Using VANET Strategy Combined with a Distributed Ant Colony Optimization: Methods and Protocols", Springer DOI: 10.1007/978-3-030-11914-0_25, January 2019, Scopus, https://link.springer.com/chapter/10.1007/978-3-030-11914-0_25
8. Abdelmoula Ait Allal, Khalifa Mansouri, **Mohamed Youssfi**, Mohammed Qbadou, "Toward a Study of Environmental Impact of Shipping Industry and Proposal of Alternative Solutions", Advanced Intelligent Systems for Sustainable Development (AI2SD'2018), Springer DOI: 10.1007/978-3-030-11881-5_21, January 2019, Scopus, https://link.springer.com/chapter/10.1007/978-3-030-11881-5_21
9. Abdelmoula Ait Allal, Khalifa Mansouri, **Mohamed Youssfi**, Mohammed Qbadou, "Ship Operational Measures Implementation's Impact on Energy-Saving and GHG Emission: Vol 2: Advanced Intelligent Systems Applied to Energy", Advanced Intelligent Systems for Sustainable Development (AI2SD'2018), Springer DOI: 10.1007/978-3-030-11881-5_21, January 2019, Scopus, https://link.springer.com/chapter/10.1007/978-3-030-12065-8_28
10. Abdelmajid Bousselham, Omar Bouattane, **Mohamed Youssfi**, Abdelhadi Raihani, "Improved brain tumor segmentation in MRI images based on thermal analysis model using U-Net and GPUs", Hindawi DOI: 10.1155/2019/1758948, July 2019, Scopus, <https://www.hindawi.com/journals/ijbi/2019/1758948/>
11. Ouafae Serrar, Oum el Kheir Abra, **Mohamed Youssfi**, Ahmed Tamtaoui, "Robust Video Coding Based on Perceptual Unequal Protection", International Conference on Information Technology and Communication Systems, Springer DOI: 10.1007/978-3-319-64719-7_29, January 2018, Scopus, https://link.springer.com/chapter/10.1007/978-3-319-64719-7_29

- **Prix de recherche :**

Deuxième Prix de la Première édition du concours du « Grand prix pour l'invention et la recherche en science et technologie » organisé par le ministère de l'éducation nationale, de l'enseignement supérieur de la formation des cadres et de la recherche scientifique, le 15 Mai 2008 par le thème « **Parallel Re-configurable Mesh Computer Emulator “P.Prog.Lab: Parallel Programming Laboratory”** ».

D. Cinq dernières thèses dirigées qui ont été soutenues :

Titre	Doctorant	Directeur	Date Soutenance
Distributed Artificial Intelligence Models for Smart Environments Based on Deep Reinforcement Learning: Application in Enhancing Public Security and Emergency Services Management	El Mehdi BEN LAOULA	YOUSSFI Mohamed	20/04/2024
Modèles de correction des erreurs dans un environnement Big Data basés sur l'Intelligence Artificielle Distribuée	Sidi Mohamed SNINEH	YOUSSFI Mohamed	18/02/2022
Models of High-Performance Computing Middleware based on Micro-Agents and Massively Distributed Artificial Intelligence	Fatima Ezzahra EZZRHARI	YOUSSFI Mohamed	24/09/2022
Modèles d'interopérabilité des middlewares multi-agents basés sur l'intelligence artificielle distribuée	EL ABID AMRANI Noureddine	YOUSSFI Mohamed	19/02/2022
Fraud prediction and trading models in financial markets based on artificial intelligence	Bouzgarne Itri	YOUSSFI Mohamed	23/07/2022

Langues :

- Français, Arabe, Anglais

Loisirs :

- Musique, Sport