

Academic Resume



Asma Cherif

Associate Professor, Information Technology Department

Contact Information.

Room 144, acherif@kau.edu.sa.

Highest Degree.

2013, PhD, Distributed Systems and communication networks, Lorraine University, France.

Academic and Professional Experiences.

1. **2023 - Present**
Reviewer for Expert Systems with Applications, Elsevier, , .
2. **2022 - 2022**
Reviewer for the 7th conference on Information, Communication and Computing Technology ICICCT 2022, Springer, Saudi Arabia, -.
3. **2022 - 2022**
Reviewer for the book Decision Making and Security Risk Management in IoT environments, Springer, , .
4. **2020 - 2020**
Reviewer for the 31st International Conference on Database and Expert Systems Applications - DEXA2020, -, -.
5. **2017 - Present**
Reviewer for the International Journal of Advanced Computer Science and Applications, -, -.
6. **2016 - 2016**
Reviewer for the book "Innovative solutions for access control management", IGI Global, , .
7. **2013 - 2015**
Assistant professor, Tunisia, Engineering school of gabes.
8. **2011 - 2012**
Full-time teacher and researcher, France, Lorraine University and Inria Lorraine.
9. **2009 - 2011**
part-time teacher, France, Lorraine University.

Research Interests.

Distributed systems, Collaboration and concurrency, Access control, Formal methods, Artificial Intelligence.

Teaching Interests.

Software engineering and design patterns, Operating systems + Linux administration, Cloud computing security, Big data technologies and analytics, Cloud security.

Certifications and Trainings.

1. Grid 5000 Spring School.

Social, Scientific and Professional Affiliation.

1. -, ATER, Cassis Team, Inria Lorraine, France.

Excellence Awards and Patents.

1. 2018, Interior, Student Scientific forum 10, 2nd best poster award for the student under my supervision.
2. 2018, Interior, Student scientific forum 10, 3rd poster award for the student under my supervision.
3. 2021, International, Woman in ICT award (student PhD course project paper), IEEE CSDE/i-COSTE 2021 08-10th December 2021 Brisbane, Australia.
4. 2018, Interior, 3minutes competition, 3rd award for the student under my supervision.
5. 2007, International, Internship, Inria, france.
6. 2009, Interior, Ministerial grant, Inria, France.
7. 2017, Interior, Student scientific forum 9, best paper award for the student under my supervision.

Funded Projects.

1. 2017, Collaborative editing over opportunistic networks, Kacst, 1-17-02-009-0015.
2. 2018, Edge based real time collaborative editors, DSR-DG-1441-8-612, -.
3. 2021, Credit card fraud detection using deep learning, Institutional fund IFPRC-032-612-2020
4. 2022, Lightweight security protocol for UAVs, DSR 1564-612-1443 :IFPIP
5. 2022, Deep big data analytics for smart and secure environmental services in Saudi Arabia, DSR- 1412-612-1443 :IFPIP
6. 2020, Device-to-device authentication for IoT, DSR, DG-10-612-144.
7. 2019, Distributed access control for IoT in healthcare, DSR, DG1441-9-612.

Publications.

1. Basmah Alzahrani, Asma Cherif, Suhair Alshehri, Abdessamad Imine, "Securing Big Graph Databases: An Overview Of Existing Access Control Techniques", Int. J. Of Intelligent Information And Database Systems, In Press, 2024.
2. Sumayya Al-Fadhli, Hajar Al-Harbi, Asma Cherif, "Speech Recognition Models For Holy Quran Recitation Based On Modern Approaches And Tajweed Rules: A Comprehensive Overview", International Journal Of Advanced Computer Science And Applications, vol: 14, 2023.
DOI: [10.14569/IJACSA.2023.0141297](https://doi.org/10.14569/IJACSA.2023.0141297)
3. Mahdi Jemmali, Wadii Boulila, Asma Cherif, Maha Driss, "Efficient Storage Approach For Big Data Analytics: An Iterative-Probabilistic Method For Dynamic Resource Allocation Of Big Satellite Images", Ieee Access, vol: 11, pp. 91526-91538, 2023.
DOI: [10.1109/ACCESS.2023.3299213](https://doi.org/10.1109/ACCESS.2023.3299213)
4. Manal Alqarni, Asma Cherif, Entisar Alkayyal, "Odm-Besa: An Offloading Decision-Making Framework Based On Binary Cuckoo Search Algorithm For Mobile Edge Computing", Computer Networks, vol: 226, pp. 109647, 2023.
DOI: [10.1016/j.comnet.2023.109647](https://doi.org/10.1016/j.comnet.2023.109647)
5. Eman Alharbi, Asma Cherif, Farrukh Nadeem, "Adaptive Smart Ehealth Framework For Personalized Asthma Attack Prediction And Safe Route Recommendation", Smart Cities, vol: 6, pp. 2910-2931, 2023.
DOI: [10.3390/smartcities6050130](https://doi.org/10.3390/smartcities6050130)
6. Basmah Al-Zahrani, Suhair Alshehri, Asma Cherif, Abdessamad Imine, "Property Graph Access Control Using View-Based And Query-Rewriting Approaches", 2022 Ieee/Acs 19th International Conference On Computer Systems And Applications (Aiccsa), pp. 1-2, 2022.
DOI: [10.1109/AICCSA56895.2022.10017709](https://doi.org/10.1109/AICCSA56895.2022.10017709)
7. Eman Alharbi, Asma Cherif, Farrukh Nadeem, Tariq Mirza, "Machine Learning Models For Early Prediction Of Asthma Attacks Based On Bio-Signals And Environmental Triggers", 2022 Ieee/Acs 19th International Conference On Computer Systems And Applications (Aiccsa), pp. 1-7, 2022.
DOI: [10.1109/AICCSA56895.2022.10017305](https://doi.org/10.1109/AICCSA56895.2022.10017305)
8. Asma Cherif, Suhair Alshehri, Manal Kalkatawi, Abdessamad Imine, "Towards An Intelligent Adaptive Security Framework For Preventing And Detecting Credit Card Fraud", 2022 Ieee/Acs 19th International Conference On Computer Systems And Applications (Aiccsa), pp. 1-8, 2022.
DOI: [10.1109/AICCSA56895.2022.10017814](https://doi.org/10.1109/AICCSA56895.2022.10017814)
9. Arwa Bokhari, Asma Cherif, "Qadm: A Quality-Aware Data Model For Freelancing Applications Based On Recommendation Systems", Journal Of Information Science, pp. 016555152211362, 2022.
DOI: [10.1177/01655515221136232](https://doi.org/10.1177/01655515221136232)
10. Asma Cherif, Arwa Badhib, Heyfa Ammar, Suhair Alshehri, Manal Kalkatawi, Abdessamad Imine, "Credit Card Fraud Detection In The Era Of Disruptive Technologies: A Systematic Review", Journal Of King Saud University - Computer And Information Sciences, 2022.
DOI: [10.1016/j.jksuci.2022.11.008](https://doi.org/10.1016/j.jksuci.2022.11.008)
11. Ghada Al-Mamari, Fatma Bouabdallah, Asma Cherif, "A Survey Of Sink Mobility Models To Avoid The Energy-Hole Problem In Wireless Sensor Networks", International Journal Of Advanced Computer Science And Applications, vol: 13, 2022.
DOI: [10.14569/IJACSA.2022.01305110](https://doi.org/10.14569/IJACSA.2022.01305110)
12. Abdessamad Imine, Asma Cherif, Noha Alsulami, "Collaborative Editing Over Opportunistic Networks", International Journal Of Ad Hoc And Ubiquitous Computing, vol: 39, pp. 1, 2022.
DOI: [10.1504/IJAHUC.2022.10044289](https://doi.org/10.1504/IJAHUC.2022.10044289)

Publications.

13. Doaa Shehab, Heyfa Ammar, Asma Cherif, "Panic Behavior Detection Using Unsupervised Machine Learning Techniques: A Comparative Study", 2021 Ieee Asia-Pacific Conference On Computer Science And Data Engineering (Csde), pp. 1-6, 2021.
DOI: [10.1109/CSDE53843.2021.9718486](https://doi.org/10.1109/CSDE53843.2021.9718486)
14. Ebtihal Abdulrahman, Suhair Alshehri, Asma Cherif, "Blockchain-Based Access Control For The Internet Of Things: A Survey", 2021 Ieee Asia-Pacific Conference On Computer Science And Data Engineering (Csde), pp. 1-6, 2021.
DOI: [10.1109/CSDE53843.2021.9718468](https://doi.org/10.1109/CSDE53843.2021.9718468)
15. Seham Alnefaie, Asma Cherif, Suhair Alshehri, "A Distributed Fog-Based Access Control Architecture For Iot", Ksii Transactions On Internet And Information Systems, vol: 15, 2021.
DOI: [10.3837/tiis.2021.12.016](https://doi.org/10.3837/tiis.2021.12.016)
16. Eman T. Alharbi, Farrukh Nadeem, Asma Cherif, "Predictive Models For Personalized Asthma Attacks Based On Patient'S Biosignals And Environmental Factors: A Systematic Review", BMC Medical Informatics And Decision Making, vol: 21, 2021.
DOI: [10.1186/s12911-021-01704-6](https://doi.org/10.1186/s12911-021-01704-6)
17. Arwa Badhib, Asma Cherif, Suhair Alshehri, "An Overview Of Continuous Device-To-Device Authentication Techniques For The Internet Of Things", International Journal Of Ad Hoc And Ubiquitous Computing, vol: 36, pp. 189, 2021.
DOI: [10.1504/IJAHUC.2021.114103](https://doi.org/10.1504/IJAHUC.2021.114103)
18. Azzah Allahim, Asma Cherif, Abdessamad Imine, "A Hybrid Approach For Optimizing Arabic Semantic Query Expansion", Accepted For Publication In The 18th Acs/Ieee International Conference On Computer Systems And Applications Aiccsa 2021, 2021.
19. Arwa Badhib, Suhair Alshehri, Asma Cherif, "A Robust Device-To-Device Continuous Authentication Protocol For The Internet Of Things", Ieee Access, pp. 1-1, 2021.
DOI: [10.1109/ACCESS.2021.3110707](https://doi.org/10.1109/ACCESS.2021.3110707)
20. Eman Alharbi, Farrukh Nadeem, Asma Cherif, "Smart Healthcare Framework For Asthma Attack Prediction And Prevention", 2021 National Computing Colleges Conference (Nccc), pp. 1-6, 2021.
DOI: [10.1109/NCCC49330.2021.9428842](https://doi.org/10.1109/NCCC49330.2021.9428842)
21. Manal Algarni, Asma Cherif, Entissar Alkayal, "A Survey Of Computational Offloading In Cloud/Edge-Based Architectures: Strategies, Optimization Models And Challenges", Ksii Transactions On Internet And Information Systems, vol: 15, 2021.
DOI: [10.3837/tiis.2021.03.008](https://doi.org/10.3837/tiis.2021.03.008)
22. Heyfa Ammar, Asma Cherif, "Deeprod: A Deep Learning Approach For Real-Time And Online Detection Of A Panic Behavior In Human Crowds", Machine Vision And Applications, vol: 32, 2021.
DOI: [10.1007/s00138-021-01182-w](https://doi.org/10.1007/s00138-021-01182-w)
23. Seham Alnefaie, Suhair Alshehri, Asma Cherif, "A Survey On Access Control In Iot: Models, Architectures And Research Opportunities", International Journal Of Security And Networks, vol: 16, pp. 60, 2021.
DOI: [10.1504/IJSN.2021.112837](https://doi.org/10.1504/IJSN.2021.112837)
24. Mona Alghamdi, Asma Cherif, Abdessamad Imine, "Edgedoc: An Edge-Based Distributed Collaborative Editing System", Pervasive And Mobile Computing, pp. 101288, 2021.
DOI: [10.1016/j.pmcj.2020.101288](https://doi.org/10.1016/j.pmcj.2020.101288)
25. Asma Cherif, "A Generic Pattern-Based Design For Distributed Collaborative Editors", Tem Journal, pp. 633-640, 2020.
DOI: [10.18421/TEM92-28](https://doi.org/10.18421/TEM92-28)

Publications.

26. Seham Alnefaie, Asma Cherif, Suhair Alshehri, "Towards A Distributed Access Control Model For Iot In Healthcare", 2019 2nd International Conference On Computer Applications & Information Security (Iccais), pp. 1-6, 2019.
DOI: [10.1109/CAIS.2019.8769462](https://doi.org/10.1109/CAIS.2019.8769462)
27. Mona Al-Ghamdi, Asma Cherif, Abdessamad Imine, "Towards An Edge-Based Architecture For Real-Time Collaborative Editors", 2019 Ieee/Acs 16th International Conference On Computer Systems And Applications (Aiccsa), pp. 1-8, 2019.
DOI: [10.1109/AICCSA47632.2019.9035308](https://doi.org/10.1109/AICCSA47632.2019.9035308)
28. Olfa Abusalem, Asma Cherif, Abdessamad Imine, "Towards Optimistic Access Control For Cloud-Based Collaborative Editors", 2019 Ieee/Acs 16th International Conference On Computer Systems And Applications (Aiccsa), pp. 1-8, 2019.
DOI: [10.1109/AICCSA47632.2019.9035245](https://doi.org/10.1109/AICCSA47632.2019.9035245)
29. Noha Alsulami, Asma Cherif, Abdessamad Imine, "Evaluating Data Convergence Of Collaborative Editors In Opportunistic Networks", 2017 6th International Conference On Information And Communication Technology And Accessibility (Icta), pp. 1-6, 2017.
DOI: [10.1109/ICTA.2017.8336061](https://doi.org/10.1109/ICTA.2017.8336061)
30. Noha Alsulami, Asma Cherif, "Collaborative Editing Over Opportunistic Networks: State Of The Art And Challenges", International Journal Of Advanced Computer Science And Applications, vol: 8, 2017.
DOI: [10.14569/IJACSA.2017.081135](https://doi.org/10.14569/IJACSA.2017.081135)
31. Asma Cherif, Abdessamad Imine, "Using Csp For Coordinating Undo-Based Collaborative Applications", Proceedings Of The 31st Annual Acm Symposium On Applied Computing Pages 1928-1935, 2016.
32. Asma Cherif, Abdessamad Imine, "Optimistic Access Control For Collaborative Applications", 2016.
33. Asma Cherif, Abdessamad Imine, "A Constraint-Based Approach For Generating Transformation Patterns", Proceedings 14th International Workshop On Foundations Of Coordination Languages And Self-Adaptive Systems, Foclasa 2015, Madrid, Spain, 2015.
34. Asma Cherif, Abdessamad Imine, Micha??l Rusinowitch, "Practical Access Control Management For Distributed Collaborative Editors", Pervasive And Mobile Computing, vol: 15, pp. 62-86, 2014.
DOI: [10.1016/j.pmcj.2013.09.004](https://doi.org/10.1016/j.pmcj.2013.09.004)
35. Asma Cherif, Abdessamad Imine, "On The Undoability Problem In Distributed Collaborative Applications.", Inria Hal Rp, Pp.30, 2011.
36. Asma Cherif, Abdessamad Imine, Micha??l Rusinowitch, "Optimistic Access Control For Distributed Collaborative Editors", The 2011 Acm Symposium, pp. 861, 2011.
DOI: [10.1145/1982185.1982374](https://doi.org/10.1145/1982185.1982374)
37. Moulay Driss Mechaoui, Asma Cherif, Abdessamad Imine, Fatima Bendella, "Log Garbage Collector-Based Real Time Collaborative Editor For Mobile Devices", 6th International Ict Conference On Collaborative Computing: Networking, Applications, Worksharing, 2010.
DOI: [10.4108/icst.collaboratecom.2010.28](https://doi.org/10.4108/icst.collaboratecom.2010.28)
38. Abdessamad Imine, Asma Cherif, Micha??l Rusinowitch, "An Optimistic Mandatory Access Control Model For Distributed Collaborative Editors", Inria Hal Rp???Inria-00381941v2>, Pp20, 2009.
39. Asma Cherif, Abdessamad Imine, "Undo-Based Access Control For Distributed Collaborative Editors", vol: 5738, pp. 101-108, 2009.
DOI: [10.1007/978-3-642-04265-2_14](https://doi.org/10.1007/978-3-642-04265-2_14)
40. Abdessamad Imine, Asma Cherif, Micha??l Rusinowitch, "A Flexible Access Control Model For Distributed Collaborative Editors", vol: 5776, pp. 89-106, 2009.
DOI: [10.1007/978-3-642-04219-5_6](https://doi.org/10.1007/978-3-642-04219-5_6)