

Academic Resume



Ghadah Aldabbagh

Professor, Computer Science Department

Dr. Aldabbagh holds an Associate Professor position at the Computer Science Department at the King Abdul Aziz University, Saudi Arabia.

During the summers of 2013 and 2014, she joined Professor John Cioffi's Dynamic Spectrum Management Research Group as a visiting professor at Stanford University. She was awarded by KAU four Awards of excellence in scientific publishing for faculty members for the academic year 2015-2016.

Contact Information.

Building 61, Room 137, Ext. 26925, galdabbagh@kau.edu.sa.

Highest Degree.

2011, Ph.D., Communications and Information Systems Engineering, University College London, UK.

Academic and Professional Experiences.

1. **2022 - 2022**
Technical Program Committee (TPC) Member, Valencia, Spain, 1st Muossharaka International Conference on Communications Networks and Applications (MIC - CommuNets 2022).
2. **2022 - 2022**
Co-Author of accepted Policy Brief (PB), G20, Indonesia Think Tank 20 (T20), Jakarta, Indonesia, Titled: "Driving Sustainable Mobility in Smart Cities"; accepted in Task Force 3 (TF3): Governing Climate Target, Energy Transition and Environmental Protection.
(<https://www.t20indonesia.org/tf2/driving-sustainable-mobility-in-smart-cities-considering-supporting-infrastructures-emerging-networks-and-open-secure-data/>), , .
3. **2022 - 2022**
Technical Program Committee (TPC) Member, Purwokerto, Indonesia, 10TH IEEE International Conference On Communication, Networks And Satellite.
4. **2022 - 2022**
Technical Program Committee (TPC) Member, Paris, France, 6TH INTERNATIONAL CONFERENCE ON COMMUNICATION AND NETWORK TECHNOLOGY.
5. **2022 - 2022**
Technical Program Committee (TPC) Member, Purwokerto, Indonesia on 17-18 July 2021., 10th IEEE International Conference on Communication, Networks and Satellite (IEEE COMNETSAT 2021, <http://comnetsat.org/>), , .
6. **2022 - 2022**
Speaker at the Delphi Economic Forum, Delphi, Greece, , .
7. **2022 - 2022**
Mawhibah Summer Program Mentor, , .

Academic and Professional Experiences.

8. **2021 - 2022**
Member of the KAU Council of the Deanship of Scientific Research, Jeddah, Kingdom of Saudi Arabia, Deanship of Scientific Research, King Abdulaziz University.
9. **2021 - 2021**
Mawhibah Summer Program Mentor, , .
10. **2021 - 2021**
Panel Conversation: Future Innovation, Virtual, The Global Federation of Competitiveness Councils (GFCC).
11. **2021 - 2021**
Mawhibah Scientific Evaluation Committee Member, , .
12. **2021 - 2021**
Panel Conversation: Framing the Future of Innovation, Virtual, The Global Federation of Competitiveness Councils (GFCC).
13. **2020 - 2020**
Webinar Panelist: Journey of IP for Impact Driven Innovation, October 21, 2020, Virtual, Massachusetts Institute of Technology (MIT) Ibn Khaldun (IBK) Fellowship for Saudi Arabian Woman.
14. **2020 - 2020**
Webinar Panelist: Careers in Computer Science, Engineering, December 9th, 2020., Virtual, Massachusetts Institute of Technology (MIT) Ibn Khaldun (IBK) Fellowship for Saudi Arabian Woman.
15. **2017 - 2018**
Reviewer at the 15th Learning and Technology Conference that will be held at Effat University on February 2018, , .
16. **2017 - 2018**
Guest editor Wireless Communication and Mobile Computing Journal, Special Issue on "Softwarization and Caching for the Internet of Things", , .
17. **2017 - 2018**
Technical Program Committee Member, Jordan, 1st International Conference on Wireless Communication Systems and Networks (MIC-Wireless 2018).
18. **2017 - 2017**
Keynote Speaker, Jeddah, Saudi Arabia, at the Culture and Science Fair 2017, Effat University.
19. **2017 - 2017**
Member of the Industrial Advisory Board as part of ABET Accreditation Process, Rabigh, Saudi Arabia, Faculty of Computing and Information Technology., , .
20. **2016 - 2017**
Associate Professor, Computer Science Department, Faculty of Computing and Information Technology, King Abdulaziz University, Jeddah, Saudi Arabia., , .
21. **2016 - 2017**
Technical Program Committee Member (TPC), Colchester, United Kingdom, The 9th Computer Science & Electronic Engineering Conference (CEEC 2017), University of Essex.
22. **2016 - 2017**
Reviewer at IEEE Communications Letters, , .
23. **2016 - 2016**
Member of the Industrial Advisory Board as part of ABET Accreditation Process, Rabigh, Saudi Arabia, Faculty of Computing and Information Technology.
24. **2015 - 2017**
Vice Chair of IEEE Western Saudi Arabia Section Computational Intelligence Society Chapter ~ (geo-code is Ch087), , .

Academic and Professional Experiences.

25. **2015 - 2016**
Reviewer at KSII Transactions on Internet and Information Systems, , .
26. **2015 - 2015**
Chair of Session Mobility: Mobile Computing and Applications related algorithms + Biometric, Las Vegas, Nevada USA, The International Conference on Wireless Networks ICWN'15.
27. **2015 - 2015**
Chair of Second Session at the 9th Academic Production Forum, Jeddah, Saudi Arabia, King AbdulAziz University.
28. **2015 - 2015**
Reviewer at IEEE International Communication Conference, , .
29. **2014 - 2016**
Member at Academic Accreditation Committee, Jeddah, Saudi Arabia, Deanship of Development, King AbdulAziz University.
30. **2012 - 2018**
Head of Assessment Unit (AU), Jeddah, Saudi Arabia, Faculty of Computing and Information Technology, King Abdulaziz University.
31. **2012 - 2016**
Head of the Computer Skills Unit, Jeddah, Saudi Arabia, Faculty of Computing and Information Technology, King Abdulaziz University.
32. **2011 - 2016**
Assistant Professor, Computer Science Department, Faculty of Computing and Information Technology, King Abdulaziz University, Jeddah, Saudi Arabia, , .
33. **1982 - Present**
TA, FCIT, K.A.U..

Research Interests.

Wireless Communications, Wireless Sensor Networks, Internet of Things (IoT) Platform, Internet of Everything (IoE), Connected Homes, Smart Workspace, Machine Learning, Deep Learning, Deep Reinforced Learning, Artificial General Intelligence, Artificial Intelligence Everywhere, Autonomous Vehicles.

Teaching Interests.

Machine Learning, Wireless Communications, Artificial Intelligence.

Certifications and Trainings.

1. Self-Organizing Networks, IEEE Communications Society.
2. Wireless Communications Engineering: Intermediate Fundamentals Review & Current Practices, IEEE Communications Society..
3. Active Listening (CL32030c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
4. Managing Diverse Teams (CL31330c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA..
5. Making Your Meetings Work (CL31160c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
6. Goal Setting Workshop (CL311230c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
7. Quali Coeus: Proposal Development for Non-Grants.gov sponsor -foundation or industrial- (Non-S2S) (ADM15030c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
8. Performance Development: Employee's Role (CDT20040c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
9. Performance Development: Manager's Role (CL31040c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
10. Wireless for the Internet of Things, IEEE Communications Society, November 6th, 2017.
11. Machine Learning for Big Data and Text Processing, 12-16th of June 2017, MIT Profession Education, Cambridge, MA, USA.
12. Executive Certificate in Strategy and Innovation, MIT Sloan School of Management Executive Education, 2016..
13. Executive Certificate in Management and Leadership, MIT Sloan School of Management Executive Education, 2016..
14. Machine Learning: Regression, University of Washington - Coursera.
15. Kaufman Teaching Certificate Program, Teaching & Learning Laboratory, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA, 2016..
16. Intensive Wireless Communications Engineering: Current Practice, IEEE Communications Society.
17. Fundamentals of 4G Small Cell Deployments, IEEE Communications Society..
18. VoLTE: Convergence of IMS-Based Voice and LTE, IEEE Communications Society..
19. LTE for the Wireless Engineering Practitioner: Fundamentals & Applications, IEEE Communications Society..
20. Innovations, and Intellectual Property Registration at Ministry of National Guard Health Affairs (MNG-HA).
21. Managing with Situational Leadership (CL31030c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA..
22. Conflict Management Foundations (CL32145c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
23. Effective Feedback (CL31160c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
24. Tips for Finding Your Own Mentor (CDT20091c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA..
25. Corrective Action (CL31292c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
26. Writing a Great Resume and Cover Letter (CDT22030c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
27. Tips & Techniques for Time Management (CL33010c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.

Certifications and Trainings.

28. Preparing and Delivering Presentations (CL32046c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
29. Machine Learning: Classification, University of Washington - Coursera.
30. Fundamentals of Financial Management (ADM10050c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA..
31. Networking Tips (CDT22060c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
32. Exceptional Service (CL33020c), Learning Center, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.
33. Fundamentals of 5G Small Cell Deployments, IEEE Communications Society..
34. MIT Abdul Latief Jameel World Education Lab Week, Massachusetts Institute of Technology (MIT)..
35. Leading Innovation: Toward Vision 2030, Executive Program, Sloan School of Management, Massachusetts Institute of Technology (MIT).
36. Data Science and Big Data Analytics, Making Data-Driven Decisions, MIT professional Development.
37. Internet of Things (IoT) and Machine to Machine (M2M) Essentials, IEEE Communications Society..
38. LTE Performance and Optimization Framework, IEEE Communications Society.
39. Digital Transformation: Platform Strategies for Success, MIT Management Executive Education..

Social, Scientific and Professional Affiliation.

1. 2011-2016, Honorary Visiting Lecturer, School of Computer Science and Electronic Engineering, University of Essex, Colchester, United Kingdom..
2. 2014-2014, Visiting Assistant Professor, The Dynamic Spectrum Management Research Group at the Department of Electrical Engineering, School of Engineering, Stanford University, Palo Alto, CA, USA..
3. 2017-2018, Visiting Scholar, Laboratory for Information and Decision Systems (LIDS), Massachusetts Institute of Technology, Cambridge, CA, USA..
4. -, Member, IEEE Communications Society.
5. 2020-2022, Visiting Scholar, Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA, USA.
6. 2019-2020, Coordinating and Published Policy Brief Author for Task Force 10 (TF10): Sustainable Energy, Food, and Water Systems, G20 SAUDI ARABIA, SAUDI THINK TANK 20 (T20), RIYADH, SAUDI ARABIA.
7. 2020-2021, Co-Author of published Policy Brief (PB), G20, ITALY THINK TANK 20 (T20), ROME, ITALY.
8. 2020-2020, Technical Program Committee (TPC) Member, 2020 IEEE GLOBAL COMMUNICATIONS CONFERENCE (GLOBECOM).
9. 2019-2020, Al-Dabbagh Group Membership Representative in The Energy, Sustainability And Climate Taskforce, G20 SAUDI ARABIA, BUSINESS 20, RIYADH, SAUDI ARABIA.
10. 2016-2017, Postdoctoral Associate, Laboratory for Information &&& Decision Systems (LIDS), Massachusetts Institute of Technology, Cambridge, MA, USA.
11. 2013-2013, Visiting Assistant Professor, Dynamic Spectrum Management Research Group at the Department of Electrical Engineering, School of Engineering, Stanford University, Palo Alto, CA, USA.
12. 2020-2021, Al-Dabbagh Group Membership Representative in the Digital Transformation Task Force, G20 ITALY, BUSINESS 20 (B20), ROME, ITALY.
13. 2021-2022, Co-Author of accepted Policy Brief (PB) Titled: Driving Sustainable Mobility in Smart Cities,, G20, INDONESIA THINK TANK 20 (T20), JAKARTA, INDONESIA.
14. 2020-2022, Marconi Selection Advisory Committee Member, MARCONI PRIZE - MARCONI SOCIETY.

Excellence Awards and Patents.

1. 2021, Patent, An Energy Efficient Electric Cooker, Patent Number (US 10,907,838 B2), United States Patent Office, Date of Patent: Feb. 2, 2021.
<https://patents.google.com/patent/US10907838B2/en?q=US+10%2c907%2c838+B2>.
2. 2021, Interior, Smart Cooker project accepted to participate in the final stage of the patent track of the Digital Innovation Award, Ministry of Communications and Information Technology MCIT and the Ministry of Education in Saudi Arabia.
3. 2019, International, Coordinating and Co-Authoring the Published Policy Brief Author Titled: Promoting Human-Centric Technologies and the Urban Nexus to Address the Water-Energy-Food (WEF) Sustainability Challenges of Smart Cities (https://t20saudi-arabia.org.sa/en/briefs/Pages/Policy-Brief.aspx?pb=TF10_PB11), G20 Saudi Arabia, Saudi Think Tank 20 (T20), Task Force 10 (TF10): Sustainable Energy, Food, and Water Systems.
4. 2019, International, Shortlisted nominee of the 2019 IoT Global Awards for the project titled: “Energy-Efficient IoT Home Monitoring and Automation System (EE-HMA)”, Global Awards in the Connected Consumer & Smart Home, Products and Services.
5. 2017, International, Excellent Presentation Certificate for Session 47: Design and Development of Communication Network, IEEE Communication Society Regional Flagship Conference in China; the IEEE International Communications Conference in China ICC’2017.
6. 2017, Interior, Award of Excellence in Scientific Research Publication for publishing in top 2% Impact Factor journal publications, Deanship of Scientific Research at King AbdulAziz University, April 2017..
7. 2022, International, Listed in the World Scientist and University Rankings 2021 for Top Scientist Ranking, AD Scientific Index.
8. 2021, International, Listed in the World Scientist and University Rankings 2021 for Top Scientist Ranking, AD Scientific Index.
9. 2017, Interior, Award of Excellence in Scientific Research Publication, Deanship of Scientific Research at King AbdulAziz University, April 2017..
10. 2021, International, Co-Author of published Policy Brief (PB) Titled: Promoting Sustainable Agriculture in Smart Cities; (<https://www.t20italy.org/2021/09/22/promoting-sustainable-agriculture-in-smart-cities/>), G20, Italy, Think Tank 20 (T20), Task Force 2 (TF2): Climate change, sustainable energy, and environment.
11. 2017, Interior, Award of Excellence in Scientific Research Publication, Deanship of Scientific Research at King AbdulAziz University, April 2017..
12. 2017, Interior, Award of Excellence in Scientific Research Publication, Deanship of Scientific Research at King AbdulAziz University, April 2017..
13. 2016, International, Ibn Khaldun Fellowship for Saudi Women at MIT - Award, Ibn Khaldun Fellowship.

Funded Projects.

1. 2014, Novel Protocols for Improved Internet Security and Reliability (12-INF2723-03), National Science, Technology and Innovation Plan Grant, - King AbdulAziz City for Science and Technology (KACST), PI - with Professor Izzat Darwazah from University College London..
2. 2012, ScaleUp, University of Essex and the Faculty of Computing and Information Technology (FCIT) - King AbdulAziz University, Co-Investigator - Research collaboration project.
3. 2013, Ubiquitous Wireless Access; (11-15- 1432 HiCi) with the highly cited Professor John Cioffi from Stanford University, Highly Cited Research Grant - Deanship of Scientific Research - King AbdulAziz University, With the highly cited Professor John Cioffi from Stanford University.
4. 2014, High Density Wireless Access- Coverage for Crowded Events and Locations” (12-INF2743-

- 03), National Science, Technology and Innovation Plan Grant, - King AbdulAziz City for Science and Technology (KACST), PI - with the highly cited Professor John Cioffi from Stanford University..
5. 2014, A link classification mechanism to minimize application service disruption time due to link failures in multi-hop wireless networks (D1435 - 611 – 455)., Distinct Research Study Grant -- Deanship of Scientific Research - King AbdulAziz University, PI.
 6. 2014, A Driver Safety Information Broadcast Protocol for VANET (D1435- 611 – 471), Distinct Research Study Grant -- Deanship of Scientific Research - King AbdulAziz University, PI.
 7. 2014, Maximizing Wi-Fi network performance by offloading Wi-Fi traffic to white spaces., 2. Strategic Technologies Research Award - King AbdulAziz City for Science and Technology (KACST)
 8. 2014, Research of Internet of Things technologies for advanced Crowd Management Monitoring Applications during Hajj and Umrah, (153138), General Funded Project Grant - Deanship of Scientific Research - King AbdulAziz University, PI.

Publications.

1. Mohammed A. Barayan, Arwa A. Qawas, Asma S. Alghamdi, Turki S. Alkhalagi, Raghad A. Al-Dabbagh, Ghadah A. Aldabbagh, Amal I. Linjawi, "Effectiveness Of Machine Learning In Assessing The Diagnostic Quality Of Bitewing Radiographs", *Applied Sciences*, vol: 12, pp. 9588, 2022.
DOI: [10.3390/app12199588](https://doi.org/10.3390/app12199588)
2. Haneen Alhomayni, Mai Fadel, Nikos Dimitriou, Helen Bakhsh, Ghadah Aldabbagh, Samar Alkhuraiji, "Multi-Hop Routing Protocols For Oil Pipeline Leak Detection Systems", *Electronics*, vol: 11, pp. 2078, 2022.
DOI: [10.3390/electronics11132078](https://doi.org/10.3390/electronics11132078)
3. Seham S. Bakhder, Ghadah Aldabbagh, Nikos Dimitriou, Samar Alkhuraiji, Mai Fadel, Helen Bakhsh, "Iot Networks For Monitoring And Detection Of Leakage In Pipelines", *International Journal Of Sensor Networks*, vol: 38, pp. 241, 2022.
DOI: [10.1504/IJSNET.2022.122559](https://doi.org/10.1504/IJSNET.2022.122559)
4. Eman Justaniah, Ghadah Aldabbagh, Areej Alhothali, Nesreen Abourokba, "Classifying Breast Density From Mammogram With Pretrained Cnns And Weighted Average Ensembles", *Applied Sciences*, vol: 12, pp. 5599, 2022.
DOI: [10.3390/app12115599](https://doi.org/10.3390/app12115599)
5. Abrar Alotaibi, Mai Fadel, Amani Jamal, Ghadah Aldabbagh, "Combining Multiple Seismic Attributes Using Convolutional Neural Networks", *International Journal Of Advanced Computer Science And Applications*, vol: 13, 2022.
DOI: [10.14569/IJACSA.2022.0130207](https://doi.org/10.14569/IJACSA.2022.0130207)
6. Ghadah Aldabbagh, Nikos Dimitriou, Samar Alkhuraiji, Omaimah Bamasak, Samar Babrouk, "Internet Of Mobile Things: Reliability And Security Issues And Solutions", *International Journal Of Computer Science & Network Security (Ijcsns)*, 2022.
7. Sabeen Tahir, Ghadah Abdullah Aldabbagh, Sheikh Tahir Bakhsh, Abass Md Said, "Hybrid Congestion Sharing And Route Repairing Protocol For Bluetooth Networks", *Wseas Transactions On Computers*, vol: 20, pp. 49-55, 2021.
DOI: [10.37394/23205.2021.20.6](https://doi.org/10.37394/23205.2021.20.6)
8. Youness Mourtaji, Mohammed Bouhorma, Daniyal Alghazzawi, Ghadah Aldabbagh, Abdullah Alghamdi, Chi-Hua Chen, "Hybrid Rule-Based Solution For Phishing Url Detection Using Convolutional Neural Network", *Wireless Communications And Mobile Computing*, vol: 2021, pp. 1-24, 2021.
DOI: [10.1155/2021/8241104](https://doi.org/10.1155/2021/8241104)
9. Abrar Alotaibi, Mai Fadel, Amani Jamal, Ghadah Aldabbagh, "Enhancement Of 3d Seismic Images Using Image Fusion Techniques", *International Journal Of Advanced Computer Science And Applications*, vol: 12, 2021.
DOI: [10.14569/IJACSA.2021.0120143](https://doi.org/10.14569/IJACSA.2021.0120143)
10. Daniyal M. Alghazzawi, Syed Hamid Hasan, Ghadah Aldabbagh, Mohammed Alhaddad, Areej Malibari, Muhammad Zubair Asghar, Hanan Aljuaid, "Development Of Platform Independent Mobile Learning Tool In Saudi Universities", *Sustainability*, vol: 13, pp. 5691, 2021.
DOI: [10.3390/su13105691](https://doi.org/10.3390/su13105691)
11. Ghadah Aldabbagh, Omaimah Bamasag, Lola Almasari, Rabab Alsaidalani, Afnan Redwan, Amaal Alsaggaf, "Blockchain For Securing Smart Grids", *International Journal Of Computer Science And Network Security*, 2021.
12. Ghadah Aldabbagh, "Device To Device Communications Architectures And Cross-Layer Evaluation Frameworks", *International Journal Of Computer Science And Network Security*, 2021.

Publications.

13. Ghadah Aldabbagh, Nikos Dimitriou, Samar Alkhuraiji, Omaimah Bamasag, "Radio Coverage And Device Capacity Dimensioning Methodologies For Iot Lorawan And Nb-Iot Deployments In Urban Environments", *Future Internet*, vol: 13, pp. 144, 2021.
DOI: [10.3390/fi13060144](https://doi.org/10.3390/fi13060144)
14. Eman Justaniah, Areej Alhothali, Ghadah Aldabbagh, "Mammogram Segmentation Techniques: A Review", *International Journal Of Advanced Computer Science And Applications*, vol: 12, 2021.
DOI: [10.14569/IJACSA.2021.0120564](https://doi.org/10.14569/IJACSA.2021.0120564)
15. Daniyal Alghazzawi, Ghadah Aldabbagh, Abdullah Saad AL-Malaise AL-Ghamdi, "Scaleup: Middleware For Intelligent Environments", *Peerj Computer Science*, vol: 7, pp. e545, 2021.
DOI: [10.7717/peerj-cs.545](https://doi.org/10.7717/peerj-cs.545)
16. Ghadah Aldabbagh, Daniyal M. Alghazzawi, Syed Hamid Hasan, Mohammed Alhaddad, Areej Malibari, Li Cheng, "Secure Data Exchange In M-Learning Platform Using Adaptive Tunicate Slime-Mold-Based Hybrid Optimal Elliptic Curve Cryptography", *Applied Sciences*, vol: 11, pp. 5316, 2021.
DOI: [10.3390/app11125316](https://doi.org/10.3390/app11125316)
17. Ghadah Aldabbagh, "Advanced Information Extraction System Based On Unstructured Mammogram Reports", *International Journal Of Advanced Trends In Computer Science And Engineering*, vol: 9, pp. 7052-7059, 2020.
DOI: [10.30534/ijatcse/2020/25952020](https://doi.org/10.30534/ijatcse/2020/25952020)
18. , "Energy Efficient Iot Home Monitoring And Automation System (Ee-Hma)", *International Journal Of Recent Technology And Engineering*, vol: 8, pp. 3176-3185, 2020.
DOI: [10.35940/ijrte.D8803.018520](https://doi.org/10.35940/ijrte.D8803.018520)
19. , "Two-Hop Relay Lte System Using Basic Sequential Algorithmic Scheme And Interference Control", *International Journal Of Emerging Trends In Engineering Research*, vol: 8, pp. 5764-5768, 2020.
DOI: [10.30534/ijeter/2020/139892020](https://doi.org/10.30534/ijeter/2020/139892020)
20. T. Alruhaili, G. Aldabbagh, "A Survey On Het-Nets: Challenges And Solutions For Enhanced Capacity And Energy Efficiency", *Solid State Technology*, 2020.
21. S. Basloom, A. Yahya, G. Aldabbagh, "Energy-Aware Architecture For Wireless Ad Hoc Networks", *International Journal Of Control And Automation (Iijca)*, 2020.
22. U. Al-Haddad, G. Aldabbagh, "An Improvement Of Lte Cellular Network Capacity For Mina City Through Tvws", *International Journal Of Advanced Science And Technology (Ijast)*, 2020.
23. Ghada Aldabbagh, Daniyal M. Alghazzawi, Syed Hamid Hasan, Mohammed Alhaddad, Areej Malibari, Li Cheng, Danilo Communiello, "Optimal Learning Behavior Prediction System Based On Cognitive Style Using Adaptive Optimization-Based Neural Network", *Complexity*, vol: 2020, pp. 1-13, 2020.
DOI: [10.1155/2020/6097167](https://doi.org/10.1155/2020/6097167)
24. Suzan Basloom, Nadine Akkari, Ghadah Aldabbagh, "Optimal Pragmatic Clustering For Wireless Networks", *International Journal Of Advanced Computer Science And Applications*, vol: 10, 2019.
DOI: [10.14569/IJACSA.2019.0100369](https://doi.org/10.14569/IJACSA.2019.0100369)
25. Thamary Alruhaili, Ghadah Aldabbagh, Fatma Bouabdallah, Nikos Dimitriou, Moe Win, "Optimized Wi-Fi Offloading Scheme For High User Density In Lte Networks", *Journal Of Communications*, pp. 179-186, 2019.
DOI: [10.12720/jcm.14.3.179-186](https://doi.org/10.12720/jcm.14.3.179-186)
26. G. Aldabbagh, M. Omar, H. Tayeb, R. Alafeef, and R. Aldabbagh, "Simplyortho: A Software For Orthodontics That Automates Bracket Placement", *International Journal Of Advanced Science And Technology (Ijast)*, 2019.

Publications.

27. Lamiaa F. Ibrahim, Hesham A. Salman, Zaki F. Taha, Nadine Akkari, Ghadah Aldabbagh, Omayma Bamasak, "A Survey On Heterogeneous Mobile Networks Planning In Indoor Dense Areas", Personal And Ubiquitous Computing, vol: 24, pp. 487-498, 2019.
DOI: [10.1007/s00779-019-01243-y](https://doi.org/10.1007/s00779-019-01243-y)
28. Malak Sadik, "Qos/Qoe Based Handover Decision In Multi-Tier Lte Networks", International Journal Of Digital Information And Wireless Communications, vol: 8, pp. 133-138, 2018.
DOI: [10.17781/P002420](https://doi.org/10.17781/P002420)
29. Maryam Hajjar, Ghadah Aldabbagh, Nikos Dimitriou, Moe Z. Win, "Relay Selection Based Clustering Techniques For High Density Lte Networks", Wireless Networks, vol: 25, pp. 2305-2314, 2018.
DOI: [10.1007/s11276-018-1658-7](https://doi.org/10.1007/s11276-018-1658-7)
30. Suzan Basloom, Nadine Akkari, Ghadah Aldabbagh, "Mobility Management In Sdn And Nfv-Based Next-Generation Wireless Networks: An Overview And Qualitative Evaluation", 2018 1st International Conference On Advanced Research In Engineering Sciences (Ares), pp. 1-8, 2018.
DOI: [10.1109/ARESX.2018.8723275](https://doi.org/10.1109/ARESX.2018.8723275)
31. Malak Sadik, Nadine Akkari, Ghadah Aldabbagh, "Sdn-Based Handover Scheme For Multi-Tier Lte/Femto And D2d Networks", Computer Networks, vol: 142, pp. 142-153, 2018.
DOI: [10.1016/j.comnet.2018.06.004](https://doi.org/10.1016/j.comnet.2018.06.004)
32. Maryam O. AlNabooda, Raed M. Shubair, Nadeen R. Rishani, Ghadah Aldabbagh, "Terahertz Spectroscopy And Imaging For The Detection And Identification Of Illicit Drugs", 2017 Sensors Networks Smart And Emerging Technologies (Senset), pp. 1-4, 2017.
DOI: [10.1109/SENSET.2017.8125065](https://doi.org/10.1109/SENSET.2017.8125065)
33. Nadeen R. Rishani, Raed M. Shubair, Ghadah Aldabbagh, "On The Design Of Wearable And Epidermal Antennas For Emerging Medical Applications", 2017 Sensors Networks Smart And Emerging Technologies (Senset), pp. 1-4, 2017.
DOI: [10.1109/SENSET.2017.8125046](https://doi.org/10.1109/SENSET.2017.8125046)
34. Hesham A. Salma, Lamiaa Fattouh Ibrahim, Ghadah A. Aldabbagh, Zaki Fayed, "Using Clustering Techniques For Topological Planning Of Heterogeneous Mobile Networks In Dense Population Areas", J&Amp;Ouml;Kull Journal, 2017.
35. H. Salman, L. Ibrahim, G. Aldabbagh, Z. Fayed, "Analysis And Evaluation Of Parameters Used To Plan Indoor Heterogeneous Mobile Networks In Dense Areas", J&Amp;Ouml;Kull Journal, 2017.
36. Ghadah Aldabbagh; Peer Azmat Shah; Halabi B. Hasbullah; Khalid Awan, "Fuzzy Logic Based Enhanced Aomdv With Link Status Classification For Efficient Multi-Path Routing In Multi-Hop Wireless Networks", Journal Of Computational And Theoretical Nanoscience, 2017.
37. Maryam Hajjar, Ghadah Aldabbagh, Nikos Dimitriou, Moe Z. Win, "Hybrid Clustering Scheme For Relaying In Multi-Cell Lte High User Density Networks", Ieee Access, vol: 5, pp. 4431-4438, 2017.
DOI: [10.1109/ACCESS.2016.2627527](https://doi.org/10.1109/ACCESS.2016.2627527)
38. Khalid Almohammadi, Hani Hagrass, Daniyal Alghazzawi, Ghadah Aldabbagh, "A Survey Of Artificial Intelligence Techniques Employed For Adaptive Educational Systems Within E-Learning Platforms", Journal Of Artificial Intelligence And Soft Computing Research, vol: 7, 2017.
DOI: [10.1515/jaiscr-2017-0004](https://doi.org/10.1515/jaiscr-2017-0004)
39. Thamary Alruhaili , Ghadah Aldabbagh, Fatma Bouabdallah , Nikos Dimitriou , Moe Win, "Performance Evaluation For Wi-Fi Offloading Schemes In Lte Networks", International Journal Of Computing &Amp; Information Sciences, 2016.
40. Suzan Basloom, Amani Nazar, Ghadah Aldabbagh, Manal Abdullah, Nikos Dimitriou, "Resource Allocation Using Graph Coloring For Dense Cellular Networks", 2016 International Conference On Computing, Networking And Communications (Icnc), pp. 1-5, 2016.
DOI: [10.1109/ICCNC.2016.7440572](https://doi.org/10.1109/ICCNC.2016.7440572)

Publications.

41. Ghadah Aldabbagh, Maaz Rehan, Halabi Hasbullah, Waqas Rehan, Omer Chughtai, "A Driver Safety Information Broadcast Protocol For Vanet", *Applied Mathematics & Information Sciences*, vol: 10, pp. 451-468, 2016.
DOI: [10.18576/amis/100208](https://doi.org/10.18576/amis/100208)
42. Ulaa Al-Haddad; Ghadah Aldabbagh, "Enhancement Capacity Of Lte Cellular Network Using Tvws Considering Mina City", *Conference: Second Asia Pacific Conference On Advanced Research (Apcar 2016)*, 2016.
43. Haleh Tabrizi, Golnaz Farhadi, John Matthew Cioffi, Ghadah Aldabbagh, "Coordinated Cognitive Tethering In Dense Wireless Areas", *Etri Journal*, vol: 38, pp. 314-325, 2016.
DOI: [10.4218/etrij.16.0114.0494](https://doi.org/10.4218/etrij.16.0114.0494)
44. Khalid Almohammadi, Hani Hagrass, Daniyal Alghazzawi, Ghadah Aldabbagh, "Users-Centric Adaptive Learning System Based On Interval Type-2 Fuzzy Logic For Massively Crowded E-Learning Platforms", *Journal Of Artificial Intelligence And Soft Computing Research*, vol: 6, 2016.
DOI: [10.1515/jaiscr-2016-0008](https://doi.org/10.1515/jaiscr-2016-0008)
45. Khalid Almohammadi, Hani Hagrass, Daniyal Alghazzawi, Ghadah Aldabbagh, "A Zslices-Based General Type-2 Fuzzy Logic System For Users-Centric Adaptive Learning In Large-Scale E-Learning Platforms", *Soft Computing*, vol: 21, pp. 6859-6880, 2016.
DOI: [10.1007/s00500-016-2236-5](https://doi.org/10.1007/s00500-016-2236-5)
46. Suzan Basloom, Nadine Akkari, Ghadah Aldabbagh, "Wireless Sensor Networks: Cross-Layer Optimization Performance", *Ieee Infocom 2016 - Ieee Conference On Computer Communications Workshops (Infocom Wkshps)*, pp. 950-955, 2016.
DOI: [10.1109/INFCOMW.2016.7562217](https://doi.org/10.1109/INFCOMW.2016.7562217)
47. Afraa Khalifah, Nadine Akkari, Ghadah Aldabbagh, Nikos Dimitriou, "Hybrid Femto/Macro Rate-Based Offloading For High User Density Networks", *Computer Networks*, 2016.
DOI: [10.1016/j.comnet.2016.08.011](https://doi.org/10.1016/j.comnet.2016.08.011)
48. Maryam Hajjar, Ghadah Aldabbagh, Nikos Dimitriou, "Using Clustering Techniques To Improve Capacity Of Lte Networks", *2015 21st Asia-Pacific Conference On Communications (Apcc)*, pp. 68-73, 2015.
DOI: [10.1109/APCC.2015.7412593](https://doi.org/10.1109/APCC.2015.7412593)
49. Ghadah Aldabbagh; Halabi Hasbullah; Karan Verma; Omaima Bamasak, "Space-Efficient And Accurate Forwarding Loop Detection Method Using Bloom-Filter For Fast And Reliable Internet Routing", *Journal Of Theoretical And Applied Information Technology*, 2015.
50. Ulaa Al-Haddad; Ghadah Aldabbagh; Nikos Dimitriou, "Clustering Over Tv White Space In Dense Wireless Areas: Dynamic Hotspot Selection And Resource Allocation", *Mitteilungen Klosterneuburg*, 2015.
51. Haleh Tabrizi, Borja Peleato, Golnaz Farhadi, John M. Cioffi, Ghadah Aldabbagh, "Spatial Reuse In Dense Wireless Areas: A Cross-Layer Optimization Approach Via Admm", *Ieee Transactions On Wireless Communications*, vol: 14, pp. 7083-7095, 2015.
DOI: [10.1109/TWC.2015.2464373](https://doi.org/10.1109/TWC.2015.2464373)
52. Alessandro Ghelli, Hani Hagrass, Ghadah Aldabbagh, "A Fuzzy Logic-Based Retrofit System For Enabling Smart Energy-Efficient Electric Cookers", *Ieee Transactions On Fuzzy Systems*, vol: 23, pp. 1984-1997, 2015.
DOI: [10.1109/TFUZZ.2015.2394781](https://doi.org/10.1109/TFUZZ.2015.2394781)
53. Ulaa Al-Haddad, Ghadah Aldabbagh, Nikos Dimitriou, "Coordinated Cognitive Tethering Over Tv White-Spaces Considering Co-Channel Interference In Dense Wireless Areas", *2015 International Conference On Computational Science And Computational Intelligence (Csci)*, pp. 685-690, 2015.
DOI: [10.1109/CSCI.2015.93](https://doi.org/10.1109/CSCI.2015.93)

Publications.

54. Khalid Almohammadi, Hani Hagra, Bo Yao, Abdulkareem Alzahrani, Daniyal Alghazzawi, Ghadah Aldabbagh, "A Type-2 Fuzzy Logic Recommendation System For Adaptive Teaching", *Soft Computing*, vol: 21, pp. 965-979, 2015.
DOI: [10.1007/s00500-015-1826-y](https://doi.org/10.1007/s00500-015-1826-y)
55. Aysenur Bilgin, Hani Hagra, Alessandro Ghelli, Daniyal Alghazzawi, Ghadah Aldabbagh, "An Ambient Intelligent And Energy Efficient Food Preparation System Using Linear General Type-2 Fuzzy Logic Based Computing With Words Framework [Application Notes]", *Ieee Computational Intelligence Magazine*, vol: 10, pp. 66-78, 2015.
DOI: [10.1109/MCI.2015.2471255](https://doi.org/10.1109/MCI.2015.2471255)
56. Hesham A. Salman, Ghadah Aldabbagh, Zaki Taha, Lamiaa F. Ibrahim, "Topological Planning And Design Of Heterogeneous Mobile Networks In Dense Areas", *2015 International Conference On Computational Science And Computational Intelligence (Csci)*, pp. 709-714, 2015.
DOI: [10.1109/CSCI.2015.151](https://doi.org/10.1109/CSCI.2015.151)
57. Budoor Bawazeer, Nadine Akkari, Ghadah Aldabbagh, Nikos Dimitriou, "Wifi/Whitefi Handover: Signaling And Performance", *2015 7th International Conference On New Technologies, Mobility And Security (Ntms)*, pp. 1-6, 2015.
DOI: [10.1109/NTMS.2015.7266532](https://doi.org/10.1109/NTMS.2015.7266532)
58. Budoor Bawazeer, Nadine Akkari, Ghadah Aldabbagh, Nikos Dimitriou, "Reducing Scanning Delay For Wifi-To-Whitefi Handovers", *2015 Fifth International Conference On Digital Information And Communication Technology And Its Applications (Dictap)*, pp. 49-53, 2015.
DOI: [10.1109/DICTAP.2015.7113169](https://doi.org/10.1109/DICTAP.2015.7113169)
59. Ghadah Aldabbagh, Sheikh Tahir Bakhsh, Nadine Akkari, Sabeen Tahir, Haleh Tabrizi, John Cioffi, "Qos-Aware Tethering In A Heterogeneous Wireless Network Using Lte And Tv White Spaces", *Computer Networks*, vol: 81, pp. 136-146, 2015.
DOI: [10.1016/j.comnet.2015.02.005](https://doi.org/10.1016/j.comnet.2015.02.005)
60. Ghadah Aldabbagh, Sheikh Tahir Bakhsh, Nadine Akkari, Sabeen Tahir, Sana Khan, John Cioffi, "Distributed Dynamic Load Balancing In A Heterogeneous Network Using Lte And Tv White Spaces", *Wireless Networks*, vol: 21, pp. 2413-2424, 2015.
DOI: [10.1007/s11276-015-0921-4](https://doi.org/10.1007/s11276-015-0921-4)
61. Hani Hagra, Daniyal Alghazzawi, Ghadah Aldabbagh, "Employing Type-2 Fuzzy Logic Systems In The Efforts To Realize Ambient Intelligent Environments [Application Notes]", *Ieee Computational Intelligence Magazine*, vol: 10, pp. 44-51, 2015.
DOI: [10.1109/MCI.2014.2350952](https://doi.org/10.1109/MCI.2014.2350952)
62. Haleh Tabrizi, Golnaz Farhadi, John M. Cioffi, Ghadah Aldabbagh, "Coordinated Tethering Over White Spaces", *Ieee Transactions On Vehicular Technology*, vol: 64, pp. 4170-4179, 2015.
DOI: [10.1109/TVT.2014.2361349](https://doi.org/10.1109/TVT.2014.2361349)
63. Nadine Akkari, Ghadah Aldabbagh, Michel Nahas, John Cioffi, "Dynamic Clustering Protocol For Coordinated Tethering Over Cellular Networks", *Journal Of Network And Computer Applications*, vol: 42, pp. 92-101, 2014.
DOI: [10.1016/j.jnca.2014.03.011](https://doi.org/10.1016/j.jnca.2014.03.011)
64. Afraa Khalifah, Nadine Akkari, Ghadah Aldabbagh, "Dense Areas Femtocell Deployment: Access Types And Challenges", *2014 Third International Conference On E-Technologies And Networks For Development (Icend)*, pp. 64-69, 2014.
DOI: [10.1109/ICeND.2014.6991354](https://doi.org/10.1109/ICeND.2014.6991354)
65. Ghadah Aldabbagh, Sabeen Tahir, Sheikh Tahir Bakhsh, Abass Md Said, Sheikh Bakhsh, S. Tahir, "Hybrid Congestion Sharing And Route Repairing Protocol For Bluetooth Networks", *Proceedings Of The 2013 International Conference On Electronics, Signal Processing And Communication Systems*, 2013.

Publications.

66. Nadine Akkari, Ghadah Aldabbagh, Michel Nahas, Budoor Bawazeer, John Cioffi, Haleh Tabrizi, "Coordinated Tethering Over Cellular Networks: Handover Scenarios And Signaling", 2013 Ieee 24th Annual International Symposium On Personal, Indoor And Mobile Radio Communications (Pimrc), pp. 2170-2174, 2013.
DOI: [10.1109/PIMRC.2013.6666503](https://doi.org/10.1109/PIMRC.2013.6666503)
67. Ghadah Aldabbagh, J Ramirez Castillo, Habib M Fardoun, Habib Fardoun Fardoun, J. Ramirez Castillo, "Towards Improved Student Placement And Preparation Methods On Information Technologies Post-Secondary Education", 2013 Federated Conference On Computer Science And Information Systems (Fedcsis), pp. 689-693, 2013.
68. Heba Gamal; Salha Abdullah; Ghadah Aldabbagh, "Tools For Teaching E-Commerce Course", International Conference On Education (Iice???)2012), 2012.
69. Ghadah Abdullah Aldabbagh, Miguel Rio, "Fair Early Drop For The Fair Treatment Of Short-Lived Flows", 2011 Ieee 3rd International Conference On Communication Software And Networks (Iccsn), pp. 96-102, 2011.
DOI: [10.1109/ICCSN.2011.6014012](https://doi.org/10.1109/ICCSN.2011.6014012)
70. Ghadah Aldabbagh, M. Rio, "Fast Flows Classification For The Differentiation Of Short-Lived Flows From Long-Lived Flows", The 2011 International Conference On Network Communication And Computer (Icncc 2011), Ieee Catalog Number: Cfp1150m-Prt, Isbn: 978-1-4244-9550-4, New Delhi, India, 2011.
71. Ghadah Aldabbagh, Miguel Rio, Izzat Darwazeh, "Fair Early Drop: An Active Queue Management Scheme For The Control Of Unresponsive Flows", 2010 Ieee 10th International Conference On Computer And Information Technology (Cit), pp. 2668-2675, 2010.
DOI: [10.1109/CIT.2010.449](https://doi.org/10.1109/CIT.2010.449)
72. Ghadah Aldabbagh, G ,Rio, M, Darwazeh, I, "Fair Early Drop: An Active Queue Management Scheme For The Control Of Unresponsive Flows", Computer And Information Technology International Conference, pp. 2668-2675, 2010.
73. Ghadah Aldabbagh, C.Todd, "A Fair Qos Architecture", Proceedings Of The London Communications Symposium Conference, 2006.