

## Academic Resume



### Asaad Ahmed , Computer Science Department

I am an associate professor at Faculty of Computing and Information Technology, King Abdul-Aziz University, Jeddah, Saudi Arabia. I am a Consultant for Vice Presidency of Development and Vice Presidency for Graduate studies and scientific research, King Abdul-Aziz University, Jeddah, Saudi Arabia. My research interests include cloud computing, mobile computing, Internet of Things, smart home, data science, dynamic distributed systems, big data, and mobile crowd sensing, Software engineering.

#### Contact Information.

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#### Highest Degree.

2012, Doctoral Degree, Computer Science, Nara Institute of Science and technology, Japan, Japan.

#### Academic and Professional Experiences.

1. **2023 - Present**  
professor of computer science at Mathematics and Computer Science Department, Egypt, Faculty of Science, Al-Azhar University, , .
2. **2021 - Present**  
a scientific consultant of Vice President for Graduate Studies and Scientific Research, Jeddah, Saudi Arabia, King Abdulaziz University.
3. **2021 - Present**  
Associate professor of computer science at Computer Science Department, Faculty of Computing and Information Technology, King Abdulaziz University, Jeddah, Saudi Arabia, King Abdulaziz University.
4. **2018 - 2021**  
A scientific consultant of Vice President for Development, Jeddah, Saudi Arabia, King Abdulaziz University.
5. **2017 - 2022**  
Associate professor of computer science at Mathematics and Computer Science Department,, Egypt, Faculty of Science, Al-Azhar University.
6. **2015 - 2017**  
Lecturer at Mathematics and Computer Science Department,, Egypt, Faculty of Science, Al-Azhar University.
7. **2015 - 2015**  
a postdoctoral Scholarship researcher, Japan, Nara Institute of Science and technology (NAIST).
8. **2012 - 2015**  
Lecturer at Mathematics and Computer Science Department, Faculty of Science, Al-Azhar University, Egypt, , .

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## Academic and Professional Experiences.

9. **2012 - 2013**  
Part time job at Canadian International College (CIC), Cairo, Egypt, Canadian International College (CIC).
10. **2008 - 2012**  
PhD. student at Nara Institute of science and technology (NAIST), Japan, Nara Institute of science and technology (NAIST).
11. **2001 - 2008**  
Demonstrator at Mathematics and Computer Science Department, Al-Azhar University, Egypt., Faculty of Science.

## Research Interests.

Cloud computing, Mobile cloud computing, Context aware systems, Smart home systems, Mobile crowd sensing systems, Data science and big data, Machine learning, Deep learning Algorithms, Software Engineering, Computer Networks, Ubiquitous and pervasive computing, Mobile computing, Wireless sensor networks, parallel and distributed systems.

## Teaching Interests.

Operating Systems, Software Engineering, data structure, Computer networks, System analysis and design, Artificial intelligent, Computer design, Computer design, Mobile computing, Software Engineering, Computer Organization, Introduction to Programming languages C++, C#, Java, PHP, Object oriented programming with C++, C#, Java.

## Certifications and Trainings.

1. Applied Course in Self Evaluation for Higher Education Institutes.
2. Applied Course in Educational Programs and Course Specifications.
3. Applied Course in Exam Systems and Student's Evaluations.
4. Applied Course in Research Design Skills.
5. Applied Course in Effective Presentation Skills.
6. the Certified KPI Professional training course.
7. CPD CERTIFICATE OF ATTENDANCE & LEARNING TOOL.

## Social, Scientific and Professional Affiliation.

1. 2013-Present, Peer reviewer, KSII Transactions on Internet and Information Systems.
2. 2019-Present, Member of Editorial board, International Journal of Wireless Communications and Mobile Computing, Science Publishing Group, USA.
3. 2018-Present, Peer reviewer, Journal of the Egyptian Mathematical Society (JOEMS).
4. 2021-Present, Peer reviewer, Future Computing and Informatics Journal hosted by Elsevier.
5. 2021-Present, Peer reviewer, European Journal of Management Issues Journal.
6. 2019-Present, Peer reviewer, IEEE Access Journal.
7. 2021-Present, Peer reviewer, ACM Transactions on Internet Technology (TOIT) Journal.
8. 2021-Present, Peer reviewer, ACM Transactions on Knowledge Discovery from Data (TKDD) Journal.
9. 2021-Present, Peer reviewer, China Communications Journal.
10. 2015-Present, Member of Editorial board, EMITTER International Journal of Engineering Technology.
11. 2020-Present, Member of Editorial board, International Journal of Mobile Network Communications & Telematics (IJMNCT), Wireilla Scientific Publications, New South Wales, Australia.
12. 2020-Present, Peer reviewer, IEEE ACM Transactions on Networking Journal.
13. 2018-Present, Peer reviewer, Al-Azhar Bulletin of Science Journal, Egypt.
14. 2021-Present, Peer reviewer, Connection Science Journal.
15. 2021-Present, Peer reviewer, Vehicular Communications Journal.

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16. 2021-Present, Peer reviewer, Transactions on Sensor Networks Journal.
17. 2021-Present, Peer reviewer, The Journal of Systems & Software Journal.
18. 2016-2016, Peer reviewer, MOBIQUITOUS 2016, 13th Annual International Conference on Mobile and Ubiquitous Systems: computing, Networking and Services (international workshop on mobile ubiquitous systems, infrastructures, communications, and applications, musical 2016 ).

### **Excellence Awards and Patents.**

1. 2010, Interior, IPSJ Yamashita SIG Research Award, Information Processing Society of Japan, 2010.
2. 2012, Interior, The Outperformance Award, Graduate School of Information Science, Nara Institute of Science and Technology, Japan.
3. 2010, Interior, The best paper award, The 55th Mobile Computing and Ubiquities Communications Workshop (MBL55) (2010), Japan.
4. 2012, Interior, The Best PhD Student Award, Nara Institute of Science and Technology, Japan.

### **Funded Projects.**

1. 2006, electronic project for implementing and designing the electronic coordination program and its website for students of secondary school certificate in Al-Azhar University, Al-Azhar University, Egypt
2. 2020, A new self-assessment & TQM hybrid MCDM fuzzy model for enhancing the KPIS in mega universities, Deanship of Scientific Research
3. 2022, bUGS PREDICTING AND LOCALIZING SYSTEM USING MACHINE LEARNING AND BUG REPORTS, Deanship of Scientific Research

## **Publications.**

1. Shatha Alsaedi, Ahmed A. A. Gad-Elrab, Amin Noaman, Fathy Eassa, "Two-Level Information-Retrieval-Based Model For Bug Localization Based On Bug Reports", Electronics, vol: 13, pp. 321, 2024.  
DOI: [10.3390/electronics13020321](https://doi.org/10.3390/electronics13020321)
2. Shatha Abed Alsaedi, Amin Yousef Noaman, Ahmed A. A. Gad-Elrab, Fathy Elbouraey Eassa, "Nature-Based Prediction Model Of Bug Reports Based On Ensemble Machine Learning Model", Ieee Access, vol: 11, pp. 63916-63931, 2023.  
DOI: [10.1109/ACCESS.2023.3288156](https://doi.org/10.1109/ACCESS.2023.3288156)
3. Norah Abdullah Al-johany, Fathy Elbouraey Eassa, Sanaa Abdullah Sharaf, Amin Y. Noaman, Asaad Ahmed, "Prediction And Correction Of Software Defects In Message-Passing Interfaces Using A Static Analysis Tool And Machine Learning", Ieee Access, pp. 1-1, 2023.  
DOI: [10.1109/ACCESS.2023.3285598](https://doi.org/10.1109/ACCESS.2023.3285598)
4. 2- Mahmoud S. Sayed, Ahmed A. A. Gad-Elrab, Khaled A. Fathy, K. R. Raslan, "Unsupervised Content Based Image Retrieval Using Pre-Trained Cnn And Pcn Features Extractors", International Journal Of Intelligent Engineering And Systems, 2023.
5. Mahmoud S. Sayed, Ahmed A. A. Gad-Elrab, Khaled A. Fathy, Kamal R. Raslan, "A Deep Learning Content-Based Image Retrieval Approach Using Cloud Computing", The Indonesian Journal Of Electrical Engineering And Computer Science (Ijeecs), 2023.
6. Ahmed. A. A. Gad-Elrab and Amin Y. Noaman, "Clustering Ant Colony-Based Edge-Server Location Strategy In Mobile Crowdsensing", Applied Computational Intelligence And Soft Computing, 2022.
7. Abdul Hamid M. Ragab, Amin Y. Noaman, Ahmed A. A. Gad-Elrab ,and Ezz H. Abdul Fatah, "A New Self-Assessment & Tqm Hybrid Mcdm Fuzzy Model For Enhancing The Kpis In Mega Universities", Applied Computational Intelligence And Soft Computing, 2022.
8. Belal Z. Hassan, Ahmed. A. A. Gad-Elrab, Mohamed S. Farag, and Shaban E. Abo Youssef, "An Integrated Node Selection Model Using Fahp And Ftopsis For Data Retrieval In Ubiquitous Computing", Applied Computational Intelligence And Soft Computing, 2022.
9. Ahmed A.A. Gad-Elrab, "Modern Business Intelligence: Big Data Analytics And Artificial Intelligence For Creating The Data-Driven Value", 2021.  
DOI: [10.5772/intechopen.97374](https://doi.org/10.5772/intechopen.97374)
10. Ahmed A. A. Gad-Elrab, Tamer A.A. Alzohairy, Kamal R. Raslan, Farouk A. Emara, "Genetic-Based Task Scheduling Algorithm With Dynamic Virtual Machine Generation In Cloud Computing", International Journal Of Computing, pp. 165-174, 2021.  
DOI: [10.47839/ijc.20.2.2163](https://doi.org/10.47839/ijc.20.2.2163)
11. Farouk Emara, "Genetic-Based Multi-Objective Task Scheduling Algorithm In Cloud Computing Environment", International Journal Of Intelligent Engineering And Systems, vol: 14, pp. 571-582, 2021.  
DOI: [10.22266/ijies2021.1031.50](https://doi.org/10.22266/ijies2021.1031.50)
12. Ahmed. A.A. Gad-Elrab, Amin. Y. Noaman, "A Two-Tier Bipartite Graph Task Allocation Approach Based On Fuzzy Clustering In Cloud&Fog Environment", Future Generation Computer Systems, vol: 103, pp. 79-90, 2020.  
DOI: [10.1016/j.future.2019.10.003](https://doi.org/10.1016/j.future.2019.10.003)
13. SHEREEN A. EL-AAL, AHMED A. A. GAD-ELRAB, AFAF A. S. ZAGHROUT, NEVEEN I. GHALI, "Context-Aware Reasoning Model Using Deep Learning And Fog Computing For Waste Management In Iots Environments", Journal Of Theoretical And Applied Information Technology, 2020.
14. Asmaa Mohamed fathy, "Deep Embedding Data Fusion Scheme Using Variational Graph Auto-Encoder In Iot Environments", International Journal Of Advanced Trends In Computer Science And Engineering, vol: 9, pp. 4363-4372, 2020.  
DOI: [10.30534/ijatcse/2020/28942020](https://doi.org/10.30534/ijatcse/2020/28942020)

## Publications.

15. Asaad Ahmed Gad-Elrab Ahmed, "Benefits And Challenges Of Internet Of Things For Telecommunication Networks", 2019.  
DOI: [10.5772/intechopen.81891](https://doi.org/10.5772/intechopen.81891)
16. Ahmed. A. A. Gad-Elrab, Amin. Y. Noaman, "Fuzzy Clustering-Based Task Allocation Approach Using Bipartite Graph In Cloud-Fog Environment", *Mobiquitous: Computing, Networking And Services*, pp. 454-463, 2019.  
DOI: [10.1145/3360774.3360833](https://doi.org/10.1145/3360774.3360833)
17. Ahmed. A. A. Gad-Elrab, "A Dynamic Genetic-Based Context Modeling Approach In Internet Of Things Environments", *International Journal Of Advanced Trends In Computer Science And Engineering*, vol: 8, pp. 2699-2709, 2019.  
DOI: [10.30534/ijatcse/2019/03862019](https://doi.org/10.30534/ijatcse/2019/03862019)
18. Ahmed A. A. Gad-ElRab, Almohammady S. Alsharkawy, "Interval Tree-Based Task Scheduling Method For Mobile Crowd Sensing Systems", *Journal Of Communications Software And Systems*, vol: 14, 2018.  
DOI: [10.24138/jcomss.v14i1.429](https://doi.org/10.24138/jcomss.v14i1.429)
19. Ahmed A.A. Gad ElRab, Almohammady S. Alsharkawy, "Multiple Criteria-Based Efficient Schemes For Participants Selection In Mobile Crowd Sensing", *International Journal Of Communication Networks And Distributed Systems*, vol: 21, pp. 384, 2018.  
DOI: [10.1504/IJCNSD.2018.094463](https://doi.org/10.1504/IJCNSD.2018.094463)
20. Ahmed A.A. Gad ElRab, Almohammady S. Alsharkawy, "An Adaptive Energy Efficient Flow Coverage Scheme For Mobile Crowd Sensing In Urban Streets", *International Journal Of Ad Hoc And Ubiquitous Computing*, vol: 29, pp. 103, 2018.  
DOI: [10.1504/IJAHUC.2018.094401](https://doi.org/10.1504/IJAHUC.2018.094401)
21. Ahmed. A. A. Gad-ElRab, Almohammady S. Alsharkawy, "Statistical-Based Data Quality Model For Mobile Crowd Sensing Systems", *Arabian Journal For Science And Engineering*, vol: 43, pp. 8195-8207, 2018.  
DOI: [10.1007/s13369-018-3374-0](https://doi.org/10.1007/s13369-018-3374-0)
22. Ahmed A. A. Gad-Elrab , Eman. H. Zaky, and Neveen I Ghali, "An Adaptive Data Backup Scheme In Mobile Cloud Computing", *The 9 Th International Conference For Basic Sciences*, 27 &dash; 29 March, 2017.
23. Ahmed A. A. Gad-Elrab , and Almohammady Sobhy Alsharkawy, "Efficient Sensing Based Data Quality Improvement For Mobile Crowd Sensing Applications", *The 9 Th International Conference For Basic Sciences*, 2017.
24. Ahmed A. A. Gad-Elrab , T. A. A. Alzohairy, and Khaled A. A. Khalf-Allah, "Deterministic Cluster-Based Skip List Protocol For Dynamic Distributed Systems", *The 9th International Conference For Basic Sciences*, 2017.
25. Ahmed. A. A. Gad-ElRab , Eman H.Zaky , Neveen I. Ghali, "An Adaptive Multi-Replica Data Offloading Scheme In Mobile Cloud Computing", *International Journal Of Computer Science And Information Security(Ijcsis)*, 2017.
26. Ahmed A. A. Gad-ElRab, Farouk A. Emara, "Adaptive Scheme For Application Methods Offloading In Mobile Cloud Computing", *International Journal Of Computer Science And Information Security (Ijcsis)*, 2017.
27. Ahmed A., T. A., Khaled A., "Deterministic Cluster-Based Skip List Protocol For Dynamic Distributed Systems", *International Journal Of Computer Applications*, vol: 176, pp. 1-11, 2017.  
DOI: [10.5120/ijca2017915552](https://doi.org/10.5120/ijca2017915552)
28. Asaad Ahmed, Hirohiko Suwa, Keiichi Yasumoto, "Zone-Based Living Activity Recognition Scheme Using Markov Logic Networks", vol: 169, pp. 109-117, 2016.  
DOI: [10.1007/978-3-319-47063-4\\_10](https://doi.org/10.1007/978-3-319-47063-4_10)



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29. Ahmed A. A. Gad-Elrab , T. A. A. Alzohairy, and Farouk. A. Emara, "Application Decision Making-Based Scheme For Method Offloading In Mobile Cloud Computing Environments", The 5th International Conference On Mathematics & Information Sciences Feb. 11-13, 2016.
30. Ahmed A. A. Gad-Elrab, K. A. ElDahshan, Almohammady S. Alsharkawy, "Energy Efficient Flow Coverage Scheme For Mobile Crowd Sensing In Urban Streets", Mobiquitous 2016: Computing Networking And Services, pp. 165-170, 2016.  
DOI: [10.1145/3004010.3004039](https://doi.org/10.1145/3004010.3004039)
31. Ahmed A. A. Gad-Elrab , T. A. A. Alzohairy, and B. Z. Hassan, "An Efficient Method For Multi-Constraints Service Request Distribution In Ubiquitous Environments", The Proceeding Of International Conference On Mathematics Statistics Information Technology , December 20-22, 2016.
32. Ahmed A. A. Gad-Elrab , Kamal A. ElDahshan, and Ahmed Sobhi, "A Predictable Markov Based Cache Replacement Scheme In Mobile Environments", International Journal Of Computer Science And Information Security (Ijcsis), 2016.
33. Ahmed A.A., Doaa M., "Efficient Selection Scheme For Data Processing In Wireless Sensor Networks", International Journal Of Computer Applications, vol: 139, pp. 8-16, 2016.  
DOI: [10.5120/ijca2016909230](https://doi.org/10.5120/ijca2016909230)
34. Ahmed. A., Eman. H., Neveen I., "An Adaptive Data Mapping Storage Selection Algorithm In Mobile Cloud Computing", International Journal Of Computer Applications, vol: 143, pp. 41-47, 2016.  
DOI: [10.5120/ijca2016910213](https://doi.org/10.5120/ijca2016910213)
35. Ahmed A. A. Gad-Elrab , T. A. A. Alzohairy, and B. Z. Hassan, "An Adaptive Service Distribution Genetic Algorithm With Multi-Constraints In Ubiquitous Environments", International Journal Of Computer Science And Information Security (Ijcsis), 2016.
36. Ahmed A. A. Gad-Elrab , Kamal A. ElDahshan , Mahmoud E. Embabi, and M.A.W. Mahmoud, "Two-Tier User Experience Prediction Scheme", The International Conference For Mathematics And Applications (Icma15), 2015.
37. Ahmed. A., T. A., Almohammady S., "Cluster-Based Context-Aware Routing Protocol For Mobile Environments", International Journal Of Advanced Computer Science And Applications, vol: 6, 2015.  
DOI: [10.14569/IJACSA.2015.060101](https://doi.org/10.14569/IJACSA.2015.060101)
38. Ahmed. A. A Gad - Elrab, Almohammady S. Alsharkawy, "Adaptive Context-Aware Data Management Scheme For Mobile Environments", International Journal Of Computer Trends And Technology, vol: 19, pp. 41-50, 2015.  
DOI: [10.14445/22312803/IJCTT-V19P109](https://doi.org/10.14445/22312803/IJCTT-V19P109)
39. Ahmed A. A. Gad - Elrab, Mahmoud E. Embabi, "Fuzzy Predictable Algorithm For User Experience", International Journal Of Computer Trends And Technology, vol: 20, pp. 50-58, 2015.  
DOI: [10.14445/22312803/IJCTT-V20P110](https://doi.org/10.14445/22312803/IJCTT-V20P110)
40. Kamal A., Ahmed A.A., Ahmed Sobhi, "A Distance-Based Predicted Region Policy For Cache Replacement In Mobile Environments", International Journal Of Computer Applications, vol: 126, pp. 1-10, 2015.  
DOI: [10.5120/ijca2015906086](https://doi.org/10.5120/ijca2015906086)
41. Ahmed. A., Kamal A., Mahmoud Embabi, "Fuzzy Tier-Based User Experience Prediction Scheme", International Journal Of Computer Applications, vol: 130, pp. 8-15, 2015.  
DOI: [10.5120/ijca2015907063](https://doi.org/10.5120/ijca2015907063)
42. Ahmed A.A., T.A.A. Alzohairy, Farouk A., "Application Method-Based Efficient Offloading Scheme In Mobile Cloud Computing", International Journal Of Computer Applications, vol: 132, pp. 1-8, 2015.  
DOI: [10.5120/ijca2015907304](https://doi.org/10.5120/ijca2015907304)

## Publications.

43. M. M.MohieEl-Din, Neveen I. Ghali, Ahmed. A. A. G, H. A. El Shenbary, "A Study On The Impact Of Wavelet Decomposition On Face Recognition Methods", International Journal Of Computer Applications, vol: 87, pp. 14-21, 2014.  
DOI: [10.5120/15188-3549](https://doi.org/10.5120/15188-3549)
44. Ahmed. A. A. Gad-Elrab , T. A. A. Alzohairy and Almohammady S. Alsharkawy, "Probabilistic Context Retrieval Time-Based Algorithms In Dynamic Environments", International Journal Of Current Engineering And Technology (Ijcet), 2014.
45. Ahmed. A. A. Gad-Elrab, Afaf A. S. Zaghrout and Doaa M.Alhilaly, "Mobile Agent Cluster-Based Algorithm For Data Processing In Wireless Sensor Networks", International Journal Of Current Engineering And Technology (Ijcet), 2014.
46. Ahmed A. A Gad - Elrab, Kamal A ElDahshan, Mahmoud E Embabi, "Conditional Activity-Based Model For Describing User Experience Using Category Theory", International Journal Of Computer Trends And Technology, vol: 18, pp. 238-246, 2014.  
DOI: [10.14445/22312803/IJCTT-V18P151](https://doi.org/10.14445/22312803/IJCTT-V18P151)
47. Asaad Ahmed, Keiichi Yasumoto, Yukiko Yamauchi, Minoru Ito, "Distance And Time Based Node Selection For Probabilistic Coverage In People-Centric Sensing", 2011 8th Annual Ieee Communications Society Conference On Sensor, Mesh And Ad Hoc Communications And Networks (Secon), pp. 134-142, 2011.  
DOI: [10.1109/SAHCN.2011.5984884](https://doi.org/10.1109/SAHCN.2011.5984884)
48. Asaad AHMED, Keiichi YASUMOTO, Minoru ITO, Naoki SHIBATA, Tomoya KITANI, "Hdar: Highly Distributed Adaptive Service Replication For Manets", Ieice Transactions On Information And Systems, vol: E94-D, pp. 91-103, 2011.  
DOI: [10.1587/transinf.E94.D.91](https://doi.org/10.1587/transinf.E94.D.91)
49. Asaad Ahmed, Keiichi Yasumoto, Yukiko Yamauchi, Minoru Ito, "Probabilistic Coverage Methods In People-Centric Sensing", Journal Of Information Processing, vol: 19, pp. 473-490, 2011.  
DOI: [10.2197/ipsjip.19.473](https://doi.org/10.2197/ipsjip.19.473)
50. Ahmed, A., Yasumoto, K., Yamauchi, Y., and Ito M., "Probabilistic Coverage In People-Centric Sensing", Proc. Of The 18th Ieee Int&Rsquo;L. Conf. On Network Protocols (Icnp 2010) , Poster Session, (Oct. 2010), Japan., 2010.
51. Ahmed, A., Yasumoto, K., Shibata, N., Kitani, T., Ito, M, "Dar: Distributed Adaptive Service Replication For Manets", Proc. Of 5th Ieee Int&#039;&#039;L. Conf. On Wireless And Mobile Computing, Networking And Communications (Wimob&#039;&#039;2009), Pp. 91-97, (Oct. 2009), Morocco, 2009.
52. M. A. Abd El-Baky, A. A. Gad El-Rab, S. M. M. Nassar, "Hpam &Ndash; A New Deadlock-Free Tree-Based Multicast Routing In Irregular Topologies", Proc. Of The International Conference On Computer Engineering & Systems Ieee (Icces&#039;&#039;07), November 27-29, 2007, Egypt., 2007.