

King Abdulaziz University Jeddah, Saudi Arabia Faculty of Computing and Information Technology



Academic Resume



Ayman Fayoumi

Professor, Information Systems Department

Contact Information.

Building 31, Room 107, Ext. 67479, afayoumi@kau.edu.sa.

Highest Degree.

2005, Ph.D. in Computer Engineering, Computer Networks, Colorado State University, USA.

Academic and Professional Experiences.

- 1. **2019 Present** Professor, Faculty of Computing and Information Technology, K.A.U..
- 2. **2019 2022** Executive Manager at Elm Co., , .
- 3. **2019 2021** Executive Manager at Elm Co., , .
- 4. **2017 2017** Senior Consultant Ministry of Hajj and Umrah, , .
- 2009 Present

Vice Dean for the Deanship of Information Technology, , K.A.U..

6. **2008 - 2009**

Manager, Computer Training and English Language, Saudi British Center.

7. 2008 - 2009

Chairman, Department of Management Information Systems, College of Business Administration.

8. 2008 - 2009

IT Senior Consultant , , The Commission of the Development of Makkah, Madinah, And Mashaaer Mokaddasa.

9. 2007 - 2009

Owner and Board Directors member, , Executives Company for Education and Training.

10. **2006 - 2008**

Director of Student Affairs , , College of Business Administration.

11. 2005 - Present

IT Senior Consultant, , Gulf Saber Consulting Company.

12. **2005 - 2009** Assistant Professor, , College of Telecom and Electronics.

13. 2000 - 2001

- Research Assistant, , Colorado State University.
- 14. **1998 1997**

Operating System Specialist, , SAUDI ARAMCO.



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Academic and Professional Experiences.

15. **1997 - 1997** Automation Specialist, , SABIC.

Research Interests.

Cloud Computing, Business Analysis, Innovation and Creativity, AI/ML, Modelling and Simulation, Quantitative Analysis.

Certifications and Trainings.

- 1. Effective Personal Leadership.
- 2. Effective Strategic Leadership.
- 3. ITIL 3 Foudamental.
- 4. Project Management Professional.
- 5. From Ideas to Action, IDEOU.
- 6. Hands-On Cloud Computing Boot Camp.
- 7. Practical Enterprise Architecture with TOGAF.
- 8. Designing a Business, IDEOU.
- 9. Certified AI Practitioner.
- 10. Storytelling for Influence, IDEOU.
- 11. Design Thinking, IDEOU.
- 12. Insights for Innovation, IDEOU.
- 13. KPI Professional Certificate.

Social, Scientific and Professional Affiliation.

- 1. -, Member, IEEE.
- 2. -, Member, Computer Society.
- 3. -, Member, Information Technology society.
- 4. -, Member, Eta Kappa Nu.
- 5. -, Member, High Performance Computing Steering Committee (2011-now), King Abdulaziz University, member..
- 6. -, Member, ABET International Academic Accreditation, CPIT College, King Abdulaziz University (2009 2010), College Coordinator.





Publications.

- 1. Mahmoud Ragab, Hesham A. Abdushkour,Louai Maghrabi, Dheyaaldin Alsalman, Ayman G. Fayoumi, Abdullah AL-Malaise AL-Ghamdi, "Improved Artificial Rabbits Optimization With Ensemble Learning-Based Traffic Flow Monitoring On Intelligent Transportation System", Sustainability, 2023.
- 2. N. Aljohani, A. Fayoumi, S. Hassan, "A Novel Focal-Loss And Class-Weight-Aware Convolutional Neural Network For The Classification Of In-Text Citations", Journal Of Information Science, 2023.
- 3. N. Aljohani, A. Fayoumi, S. Hassan, "A Novel Deep Neural Network-Based Approach To Measure Scholarly Research Dissemination Using Citations Network", Applied Science, 2021.
- 4. N. Aljohani, A. Fayoumi, S. Hassan, "An In-Text Citation Classification Predictive Model For A Scholarly Search System", Scientometrics, 2021.
- 5. R. . Sarwar, A. Zia, R. Nawaz, A. Fayoumi, N. Radi Aljohani, S. Hassan, "Webometrics: Evolution Of Social Media Presence Of Universities", Scientometrics, 2021.
- 6. A. Fayoumi, A. Hajjar, "Advanced Learning Analytics In Academic Education", International Journal On Semantic Web And Information Systems, 2020.
- 7. N. Aljohani, A. Fayoumi, S. Hassan, "Bot Prediction On Social Networks Of Twitter In Altmetrics Using Deep Graph Convolutional Networks", Soft Computing, 2020.
- 8. N. Aljohani, A. Fayoumi, S. Hassan, "Predicting At-Risk Students Using Clickstreams Data In The Virtual Learning Environment", Sustainability, 2019.
- 9. N. Aljohani, A. Fayoumi, S. Hassan, "Predicting At-Risk Students Using Clickstreams Data In The Virtual Learning Environment", Sustainability, 2019.
- Ayman G., "A Data Mining Analysis Of Erp System Using Frequent Pattern Growth Algorithm", International Journal Of Computer Applications, vol: 182, pp. 30-35, 2018. DOI: 10.5120/ijca2018918154
- Radwa Elshawi, Omar Batarfi, Ayman Fayoumi, Ahmed Barnawi, Sherif Sakr, "Big Graph Processing Systems: State-Of-The-Art And Open Challenges", 2015 Ieee First International Conference On Big Data Computing Service And Applications (Bigdataservice), pp. 24-33, 2015. DOI: 10.1109/BigDataService.2015.11
- 12. Ayman Fayoumi, "Qos Evaluation Of The Queuing Capacity Of A Cloud Load Balancer With Pareto Based Traffic", , vol: 35, No.3, 2011.
- Ayman Fayoumi, I. El Emary, "Optimizing The Performance Of Lan That Uses Csma/Cd Protocol", vol: 57, No.2, pp. 244-256, 2011.
- 14. F. Saleem, N. Salim, Ayman Fayoumi, "Ict Investment: Evaluation And Utilization Issues And Strategies In Saudi Governmental Organizations", , 2011.
- 15. Ayman Fayoumi, "Performance Evaluation Of A Cloud Based Load Balancer Severing Pareto Traffic", , vol: 32, No.2, 2011.
- 16. Ayman Fayoumi, I. El Emary, "Congestion Control Algorithms Of Wireless Sensor Networks", Proc. Of The Networking And Electronic Commerce Conference, 2011.
- 17. Ayman Fayoumi, S. Al-Ghoraibi, A. Fadel, F. Al-Aswadi, F. Mujallid, M. Wazzan, "A Simulator To Improve The Pilgrims Performance In Stoning Ritual In Hajj", vol: 11, No.5, pp. 141-144, 2011.
- 18. Ayman Fayoumi, "Evaluation Study For Multi-Fiber Wdm Switches With Zipf Based Input Load And Output Destination", 5th International Conference On Computing, 2007.
- 19. F. Al-Zahrani, Ayman Fayoumi, A. Habiballa, "Simulation Based Performance Evaluation Of Shared Limited Range Wavelength Conversion In Wdm Networks", Information And Communication Technologies International Symposium Conference, 2007.
- 20. Ayman Fayoumi, "Delay Performance Evaluation Of Shared-Buffer Based All-Optical Multihop Networks", 9th Ieee International Conference On Transparent Optical Networks, 2007.



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Publications.

- 21. Ayman Fayoumi, A. Jayasumana, "A Surjective-Mapping Based Model For Optical Shared-Buffer Cross-Connect", Acm Transactions On Networking Conference, vol: 15, No. 1, pp. 226-233, 2007.
- 22. A. Habiballa, F. Al-Zahrani, Ayman Fayoumi, A. Jayasumana, "Performance Tradeoffs Of Optical Wdm Switches Using Different Shared Range Wavelength Conversion Mechanisms", vol: 12, No. 3, 2006.
- 23. Ayman Fayoumi, A. Jayasumana, "On Limitations Of Optical Burst Switching", Iasted Communication Systems And Networks Conference, 2006.
- 24. Ayman Fayoumi, F. Al-Zahrani, A. Habiballa, A. Jayasumana, "Performance Analysis Of Multi-Fiber Synchronous Photonic Share-Per-Link Packet Switches,"", Proc. 30th Ieee Conference On Local Computer Networks, Sidney, Australia, pp. 182-189, 2005.
- 25. F. Al-Zahrani, A. Habiballa, Ayman Fayoumi, A. Jayasumana, "Performance Tradeoffs Of Shared Limited Range Wavelength Conversion Schemes In Optical Wdm Networks", Proc. Of Ieee And Ifip International Conference On Wireless And Optical Communications Networks (Wocn 2005), Dubai, Uae, 2005.
- 26. Ayman Fayoumi, A. Jayasumana, "Performance Model Of An Optical Switch Using Fiber Delay Lines For Resolving Contentions", 28th Ieee Conference On Local Computer Networks, pp. 178-186, 2003.
- 27. Ayman Fayoumi, A. Jayasumana, "Performance Evaluation Of An All-Optical Shufflenet Using Optical Buffering And Deflection Routing", , vol: 6, No. 1, pp. 43-50, 2003.
- 28. Ayman Fayoumi, A. Jayasumana, "Effects Of Optical Buffering On The Performance Of Manhattan-Street Networks", , vol: 3, No.1, pp. 161-171, 2001.
- 29. Ayman Fayoumi, A. Jayasumana, "A Comparison Of Optical Buffering And Store-And-Forward Mechanisms In Optical Networks", , 2001.
- 30. Ayman Fayoumi, A. Jayasumana, J. Sauer, "Performance Of Multihop Networks Using Optical Buffering And Deflection Routing", , 2000.