

Curriculum Vitae

Prof. Mourad Ykhlef, Ph. D

Professor

King Saud University

College of Computer Science and Information Sciences

Information System Department

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ACADEMIC RANKS

June 2017-Up to now: Full Professor in Information System department, College of Computer Science and Information Sciences, King Saud University, Riyadh, Kingdom of Saudi Arabia.

December 2010-June 2017: Associate Professor in Information System department, College of Computer Science and Information Sciences, King Saud University, Riyadh, Kingdom of Saudi Arabia.

Sept 2003-November 2010: Assistant Professor in Information System department, College of Computer Science and Information Sciences, King Saud University, Riyadh, Kingdom of Saudi Arabia.

DIPLOMAS

1999 Ph. D in Computer Science, University Bordeaux 1, Bordeaux, France

Thesis title: "Querying semi-structured data"

1995 M Sc in Artificial Intelligence, University of Paris 13, Paris, France

Thesis title: "Query optimization in deductive and object oriented databases"

1994 B Eng (Engineer) in Computer Science, University of Constantine, Constantine, Algeria

One Year Graduation Project: "Urban Spatial Analysis for Digital Cartography"

Research areas

- Data Mining and Big Data Analytics
- Social Network, Text Mining and Information Retrieval
- Data Mining for Finance and Marketing
- Risk analysis
- E-Business and E-Commerce
- Bio-inspired computing
- Collective Intelligence
- Natural Language Processing

JOURNAL PUBLICATIONS

- 1- AlSagri, H., and Ykhlef, M.: 'Quantifying Feature Importance for Detecting Depression Using Random Forest', IJACSA, 11(5), pp.628-645. ([ISI Journal](#))
- 2- MS Aldayel, M Ykhlef, AN Al-Nafjan. Electroencephalogram-based Preference Prediction Using Deep Transfer Learning IEEE Access, 2020 [ISI Journal](#)
- 3- Alsagri, H.S., and Ykhlef, M.: 'Machine Learning-based Approach for Depression Detection in Twitter Using Content and Activity Features', IEICE TRANSACTIONS on Information and Systems, 2020 E103-D,(08). ([ISI Journal](#))
- 4- M ALdayel, M Ykhlef, A Al-Nafjan. Deep Learning for EEG-Based Preference Classification in Neuromarketing. Applied Sciences 10 (4), 1525, 2020 ([ISI Journal](#))
- 5- N Alhakbani, MM Hassan, M Ykhlef, G Fortino, An efficient event matching system for semantic smart data in the Internet of Things (IoT) environment, Future Generation Computer Systems 95, 163-174, 2019 [ISI Journal](#)

- 6- Hatoon S. AlSagri, Mourad Ykhlef. Selection of Community Detection Features Influencing Negative Emotional Contagion on Twitter. International Journal of Computer Science and Network Security. Volume 19 Issue 9 Pages 29-392 , 2019 **ISI Journal**
- 7- M. Al-Ajlan and M. Ykhlef, "Deep Learning Algorithm for Cyberbullying Detection", International Journal of Advanced Computer Science and Applications, vol. 9, no. 9, 2018 **ISI Journal**
- 8- A Altameem, M Ykhlef. "Hybrid Approach for Improving Efficiency of Apriori Algorithm on Frequent Itemset" IJCSNS 18 (5), 151. IJCSNS International Journal of Computer Science and Network Security, VOL.18 No.5, May 2018. **ISI Journal**
- 9- L AlSuwaidan, M Ykhlef . "Interest-based clustering approach for social networks". Arabian Journal for Science and Engineering 43 (2), 935-947, 2018 **ISI Journal**
- 10- Y AlQahtani, M Ykhlef. "A Parallel Community Detection Algorithm for Big Social Networks".INTERNATIONAL JOURNAL OF ADVANCED COMPUTER SCIENCE AND APPLICATIONS 9 (1), 335-340 , 2018 **ISI Journal**
- 11- AlSuwaidan, Lulwah, and Mourad Ykhlef. "Information Diffusion Predictive Model Using Radiation Transfer.", IEEE Access 5.1, (2017): 25946-25957 **ISI Journal**
- 12- L AlSuwaidan, M Ykhlef. Analysis of Saudi Arabian Social Network Using Analytic Measures and Community Detection. International Journal of Computer (IJC) 27 (1), 1-12. 2017
- 13- N Alhakbani, MM Hassan, M Ykhlef, An Effective Semantic Event Matching System in the Internet of Things (IoT) Environment, Sensors 17 (9), 2017. **ISI Journal**
- 14- L AlSuwaidan, M Ykhlef. Interest-Based Clustering Approach for Social Networks. Arabian Journal for Science and Engineering, 1-13. 2017 **ISI Journal**
- 15- Mashael ALDAYEL Mourad YKHLEF. A New Sentiment Case-Based Recommender. Publication: IEICE TRANSACTIONS on Information and Systems. Publicized: 2017/04/05. DOI: 10.1587/transinf.2016EDP7441 **ISI Journal**
- 16- Al-Otaibi, S. T., & Ykhlef, M (2017). Hybrid Immunizing Solution for Job Recommender System. Frontiers of Computer Science, Springer. (**ISI Journal**) (In DOI: 10.1007/s11704-016-5241-z
- 17- AlSagri, H., and Ykhlef, M.: 'Analyzing and Detracting Negative Emotion Contagion Influence in Online Social Networks-Position Paper', International Journal of Computing, Communication and Instrumentation Engineering (IJCCIE) 2017, 4, (1).
- 18- Al-Otaibi, S. T., & Ykhlef, M. (2016). New Artificial Immune System Approach based on Monoclonal Principle for Job Recommendation. International Journal of Advanced Computer Science and Applications, SAI, Vol. 7 (4). 2016. , pages: 117-125 (**ISI Journal**).
- 19- Lulwah AlSuwaidan, Mourad Ykhlef, "Toward Information Diffusion Model for Viral Marketing in Business" International Journal of Advanced Computer Science and Applications (IJACSA), Volume 7 Issue 2, 2016. pages: 637-646 **ISI Journal**
- 20- Abeer Al-Dayel and Mourad Ykhlef, "Enhanced Arabic Document Retrieval Using Optimized Query Paraphrasing", Arabian Journal for Science and Engineering. Volume 40, Issue 11, pp 3211–3232, November 2015 **ISI Journal**
- 21- Sara A. Bin Shalan and Mourad Ykhlef, "Solving Multi-objective Portfolio Optimization Problem for Saudi Arabia Stock Market Using Hybrid Clonal Selection and Particle Swarm Optimization", Arabian Journal for Science and Engineering. Volume 40, Issue 8, pp 2407–2421, August 2015 **ISI Journal**
- 22- Al-Otaibi, S. T., & Ykhlef, M. (2015). Immunizing Job Recommender System. International Journal of Scientific Research and Innovative Technology, Vol. 2 (10). pp. 97-110. 2015
- 23- Mourad Ykhlef and Reem Alqifari, "A New Hybrid Algorithm to Solve Winner Determination Problem in Multiunit Double Internet Auction", Mathematical Problems

- in Engineering, Volume 2015 (2015), Article ID 639787, 10 pages, <http://dx.doi.org/10.1155/2015/639787> **ISI Journal**
- 24- S. Alhazmi and M. Ykhlef, "A new Top-k Conditional XML Preference Queries," International Journal of Artificial Intelligence and Applications (IJAIA), vol. 5, no. 5, pp. 65-74, 2014.
 - 25- Mourad Ykhlef and Danah Algawiaz, "A New Strategic Risk Reduction For Risk Management", International Journal of Computational Intelligence Systems volume 7 issue 6, pp 1054-1063 , 14/11/2014 **ISI Journal**
 - 26- A. Aldayel and M. Ykhlef, "Arabic users' attitudes toward Web searching using paraphrasing mechanisms," International Research Journal of Computer Science and Information Systems, vol. 2, no. 2, 2013.
 - 27- Abdulkader A. Alfantookh, Hussam M. Ramadan, Alaa Eldin M. Hafez, Mourad A. Ykhlef, Ahmad J. AlShibli, Mourad A. Benchikh. A Decision-Support System for the Saudi Ministry of Higher Education. International Journal of Computers and Their Applications (IJCA), Vol. 19, No. 4, Dec 2012
 - 28- Shaha T. Al-Otaibi, Mourad Ykhlef. Job recommender systems, International Journal of the Physical Sciences Vol. 7(29), pp. 5127-5142, 26 July, 2012 Available online at <http://www.academicjournals.org/IJPS> DOI: 10.5897/IJPS12.482 ISSN 1992 - 1950 ©2012 Academic Journals, **ISI Journal**
 - 29- Mourad Ykhlef. A Recursive Visual Query Language for XML Data. International Journal of Web Information Systems, Volume 7 issue 3, ISSN: 1744-0084, DOI: 10.1108/17440081111165893 , Emerald Group Publishing, pp 269-291, 2011 **ISI INDEXED**
 - 30- Mourad Ykhlef and Sarra Alqahtani, A Survey of graphical query languages for XML Data. Journal of King Saud University, Computer and Information Sciences, Volume 23, Issue 2, ISSN 1319-1578, Elsevier, July 2011, pp 59-70
 - 31- Mourad Ykhlef. Association Mining of Dependency between Time Series using Genetic Algorithm and Discretization, International Journal of Business Intelligence and Data Mining 2011 - Vol. 6, No.1 pp. 55-70 **ISI INDEXED**
 - 32- Mourad Ykhlef, A Quantum Swarm Evolutionary Algorithm for Mining Association Rules in Large Database, Journal of King Saud University, Computer and Information Sciences (2011)
 - 33- Mourad Ykhlef and Hebah ElGibreen, Mining Pharmacy Database Using Evolutionary Genetic Algorithm, International Journal of Electronics and Telecommunications. Volume 56, Number 4 / NOVEMBER 2010.
 - 34- Mourad Ykhlef and Sarra Alqahtani. Querying and Restructuring XML Data by Graphical Query Language, International Journal of Web Information Systems, Emerald Group Publishing, Bingley, UK , Volume 6, No. 2, 2010 pp 230-247 **ISI INDEXED**
 - 35- Mourad Ykhlef, Hebah ElGibreen, Mining Sequential Patterns Using Hybrid Evolutionary Algorithm, WASET: WORLD ACADEMY OF SCIENCE, ENGINEERING AND TECHNOLOGY, ISSN: 2070-3724, VOLUME 60, DECEMBER 2009, Page No.: 863-870.
 - 36- Mourad Ykhlef, A Survey of A Family of Recursive Query Languages for XML Data, Journal Of King Abdulaziz University, Engineering Sciences. Volume 21 No. 2 pp:35-57, 2010.
 - 37- Mourad Ykhlef, On-Line Analytical Processing Queries for Extensible Mark-up Language, Information Technology Journal, Volume 8, Issue 4, pages 521-528, 2009 **ISI INDEXED**
 - 38- Mourad Ykhlef, A logical foundation for Nested semi-structured data and Web forms, International Journal of Web Information System, Troubador Publisher, Volume 2, Issue 1, pages: 3-17, March 2006
 - 39- Mourad Ykhlef, Querying Semi-structured Data on Internet (in french), Revue d'Information Scientifique et technique, Algeria, year 2003, vol 13 number 01, pages 95-121, ISSN 1111-0015

- 40- Nicole Nidoit, Mourad Ykhlef, Fixpoint Calculus For Querying Semi-Structured Data, Lecture Notes in Computer Science, Vol 1590, Springer, 1999, pages:78-97, ISBN 3-540-65890-4 [ISI INDEXED](#)

INTERNATIONAL CONFERENCES

- 1- M. Al-Ajlan and M. Ykhlef, "Optimized Twitter Cyberbullying Detection based on Deep Learning", in 21st Saudi Computer Society National Computer Conference, Riyadh Saudi Arabia, IEEE, 2018. .
- 2- AlSuwaidan, Lulwah, and Mourad Ykhlef. "A Novel Information Diffusion Model for Online Social Networks." 19th International Conference on Information Integration and Web-based Applications & Services, 2017.(ACM Conference).
- 3- Shrooq A. Alsenan Mourad Ykhlef Statistical Machine Translation Context Modelling with Recurrent Neural Network and LDA, Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2016, Volume 533 of the series Advances in Intelligent Systems and Computing pp 75-84, Date: 18 October 2016
- 4- AlSagri, H., Ykhlef, M., 2016. "A Framework For Analyzing And Detracting Negative Emotional Contagion In Online Social Networks." In: Information And Communication Systems (ICICS), 2016 7th International Conference On Information & Communication Systems. IEEE
- 5- Al-Otaibi, S. T., & Ykhlef, M. (2014). An Artificial Immune System for Job Recommendation. In proceedings of the International Conference and Workshop on Bioinspired Intelligence, 16-18 July, Leberia, Costa Rica, pp. 37 – 43, IEEE.
- 6- Mashael Aldrees, Mourad Ykhlef: A Seeding Cellular Learning Automata Approach for Viral Marketing In Social Network. iiWAS 2014, Hanoi, Vietnam 4-6 December: 59-63
- 7- Lulwah AlSuwaidan, Mourad Ykhlef, Mohammed Abdullah Alnuem "A Novel Spreading Framework Using Incremental Clustering for Viral Marketing". Accepted in IEEE 2014 IEEE/ACS 11th International Conference on Computer Systems and Applications (AICCSA), Doha, Qatar, 10 - 14 Nov 2014
- 8- R. Al-Omar and M. Ykhlef, " A Group Decision Making for SWOT Aletranative Prioritization Using Analytic Hierarchy Process and Benefit-Cost Analysis," The 5th IEEE International Conference on Information and Communication Systems ICICS'14 April 1th to 3rd, 2014, Irbit Jordan.
- 9- M. Ykhlef with S..Bin Shalan, "Solving Portfolio Optimization Problem by Clonal Selection Algorithm" [The 2nd International Conference on Smart Media and Application](#), pp 16-23, 14-17 October 2013, Kota Kinabalu, Malaysia ISSN 2287-4348
- 10- A. Aldayel and M. Ykhlef, "Query Paraphrasing Enhancement Using Artificial Bee Colony" International Conference on Web Intelligence, Mining and Semantics. International Conference on Web Intelligence, Mining and Semantics . 2013. Madrid, Spain, ACM. 12-6-2013
- 11- Mourad Ykhlef and Danah Algawiaz, A New Strategic Risk Reduction, The 5th International Conference on Computer Science and Information Technology, 29th of March, 2013, Aman, Jordan
- 12- M. Ykhlef, A. Aldayel, Query Paraphrasing using Genetic Approach for Intelligent Information Retrieval ,The 7th International Conference for Internet Technology and Secured Transactions ICITST-2012 (IEEE UK/RI Computer Chapter), pp. 699-703. December 10-12, 2012, London, UK
- 13- Shaha T. Al-Otaibi, Mourad Ykhlef. Recommendation Systems for Enhancing E-recruitment Process, Information and Knowledge Engineering conference (IKE 2012), Las Vegas, NV., USA, 2012

- 14- Abdulkader A. Alfantookh(1), Hussam M. Ramadan, Alaa Eldin M. Hafez, Mourad A. Ykhlef, Ahmad J. AlShibli, Mourad A. Benchikh. A Decision-Support System for Higher Education, the Saudi Ministry Case Study ' in ' 27th International Conference on Computers and Their Applications (CATA-2012) March 12-14, 2012, Las Vegas, Nevada, USA, ISBN: 978-1-880843-84-0
- 15- Mourad Ykhlef and Reem AlQifari. Genetic Algorithm Based optimization for E-auction, IADIS E-Commerce, Rome Italy, 2011.
- 16- Mourad Ykhlef. A Powerful Visual Formalism for XML Data. The 12th International Conference on Information Integration and Web-based Application and Services (iiWAS2010). 8-16 December 2010, in Paris, France (ACM proceedings)
- 17- Mourad Ykhlef and Sarra Alqahtani. A new Graphical Query Language for Retrieving Telecommunication Data. STS International Conference on Communication Technologies, King Saud University, Riyadh, Saudi Arabia January 18-20, 2010
- 18- Mourad Ykhlef, Yousuf Aldukhayyil and Muath Alfawzan. Mining Sequential Patterns in Telecommunication Database Using Genetic Algorithm. STS International Conference on Communication Technologies, King Saud University, Riyadh, Saudi Arabia January 18-20, 2010.
- 19- Mourad Ykhlef and Abdulaziz Al-Reshoud. Association mining of Time Series Dependency. The 11th International Conference on Information Integration and Web-based Application and Services (iiWAS2009). 14-16 December 2009, in Kuala Lumpur, Malaysia (ACM proceedings)
- 20- Mourad Ykhlef and Sarra Alqahtani. GQLX: A new Graphical Query Language for XML Data. The 11th International Conference on Information Integration and Web-based Application and Services (iiWAS2009). 14-16 December 2009, in Kuala Lumpur, Malaysia (ACM proceedings)
- 21- Mourad Ykhlef and El-Gibreen H. 2009. Mining Sequential Patterns in Pharmacy Database Using Genetic Algorithm. 4th International Conference on Broadband Communication, Information Technology & Biomedical Applications BroadBandCom '09, Wroclaw, Poland.
- 22- Mourad Ykhlef, Recursive SQL-like query language for XML, the 9th International conference on Information Integration and Web-based Applications and Services (IIWAS 2007), 3-5 Dec 2007, Jakarta
- 23- Mourad Ykhlef, Querying Web Forms and Nested Semi-structured Data, the 7th International Conference on Information Integration and Web-based Applications and services (IIWAS 2005), 19-21 Sept 2005, Malaysia, [books@ocg.at](http://books.ocg.at) of Austrian Computer Society Band 196, V 1, pages: 399-411, ISBN:3-85403-196-3
- 24- Nicole Bidoit, Sofian Maabout, Mourad Ykhlef, A family of Nested Query Languages for Semi-structured Data, Foundations of Information and Knowledge Systems, First International Symposium, FoIKS Burg, Germany, 2000, Lecture Notes in Computer Science, Vol 1762, Springer 2000, pages: 13-30, ISBN 3-540-67100-5 **ISI INDEXED**
- 25- Nicole Bidoit, Sofian Maabout, Mourad Ykhlef, A nested language for querying and integrating semi-structured data (in french), 15th International Conference in Advanced Databases BDA'1999, Bordeaux, France, pages:63-82
- 26- Nicole Bidoit, Mourad Ykhlef, Fixpoint Path Queries, International Workshop on the Web and Databases WebDB'1998, in conjunction with EDBT Valencia, Spain, March 1998, pages 56-62
- 27- Rachid Belamri, Mohamed Keireddine Krolladi, Mourad Ykhlef, Mourad Zeghib, Urban Spatial Analysis for Digital Cartography, International Conference on Signal And Image Processing, Algiers, Algeria Oct 1994

From Sept 2003, I taught the following courses:

Ph. D courses

- IS 611 – Information and Knowledge Management
- IS 621 – Web Content Management
- IS 623 – Data Warehouses and Knowledge Discovery

Master courses

- IS 522 – Enterprise Application Development
- IS 526 – Knowledge Management Systems
- IS 531 – Document storage and Information Retrieval
- IS 533 – Advanced topics in Databases
- IS 537 – Artificial Intelligence and Knowledge-based Systems
- IS 541 – Data Mining and Knowledge Discovery
- IS 545 – Computer Information in Management
- IS 550 – Information and Requirements Engineering
- IS 591 – Selected Topics in Information Systems
- IS 592 – Selected Topics in Enterprise Information Systems
- IS 593 – Selected Topics in E-Commerce

Bachelor courses

- IS 230 – Introduction to Database Systems
- IS 240 – System Analysis and Design
- IS 335 – Database Management Systems
- IS 463 – Introduction to Data Mining
- IS 465, IS 466 – Decision Support Systems
- IS 491 – Selected topics in Information systems
- ISY 358 -- Data Visualization

Diploma courses

- CSC1101 – Programming Language 1 (C)
- CSC1201 – Programming Language 2 (C++)
- CSC 1207 – Databases
- CT 1412 - SQL Client/Server Systems
- TEC 1513 – Java Programming
- MRT 1209 – Database Programming for Medical Records

PH. D THESIS SUPERVISION

Running

1. Mrs Meshael Adayel, Neuro-Marketing (running)
2. Mrs Reem Alghanam. Social Mining (running)

Graduated

1. Mrs Hatoon Asaqri, Social Networks Mining for Analyzing and Detracting Negative Emotion Contagion 13 May 2020
2. Mrs Norah Hakbani, A Dynamic and Intelligent Event Matching Service for Semantic Publish Subscribe System in the Internet of Things Environment (Graduated June 2018)
3. Mrs Lulwah Asuwaidan, A Spreading Method for Viral Marketing Using Social Network Mining, (Graduated in 7 January 2018)
4. Mrs Shaha T. Al-Otaibi, Metaheuristic Optimization Approach for Job Recommender System, (Graduated in June 2016)

M. SC THESIS SUPERVISION

1. Monirah Alajlan, Metaheuristic Optimization for Semantic Cyber bullying Detection in Social Media, graduated Dec 2018.
2. Shaikah Alhazimi, Expressing Preferences over eXtensible Markup Queries Language Data, 2015
3. Rehab Al Omar, A benefit/cost methodology for SWOT alternative prioritization, 2014
4. Sara Shalan, Solving portfolio optimization problem, the case of Saudi Arabia Stock market, 2014
5. Abeer Aldayel, Arabic document retrieving using paraphrasing and optimization strategy, 2013