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https://scholar.google.com/citations?hl=en&user=a6bof9sAAAAJ&view_op=list_works&sortby=pubdate

Instructor, Database System, Query processing, collaborative caching
Doctor of Philosophy in Database Systems
Faculty of Computer Science and Information Technology

PERSONAL INFORMATION

Marital Status: Married
Nationality   : Sudanese
Date of Birth : April 14, 1979
Place of Birth : Abu Haraz, Sudan

EDUCATION

2008- 2013	**UNIVERSITI PUTRA MALAYSIA** Doctor of Philosophy in Database Systems Faculty of Computer Science and Information Technology
2006-2007	**UNIVERSITI UTARA MALAYSIA** Master of Science in Information Technology
2002- 2006	**INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA** Bachelor Degree in Information Technology

TEACHING EXPERIENCE

2013 – Present   Shaqra University, Kingdom of Saudi Arabia
- College of Computing & Information Technology

2012- 2013   International Islamic University Malaysia (IIUM) Selangor, Malaysia
- Basic Computer Skills for Bridging Student, CELPAD

2012-2013   International Islamic University Malaysia (IIUM) Selangor, Malaysia
- Internet Application for Bridging Student, CELPAD

2011-2012   International Islamic University Malaysia (IIUM) Selangor, Malaysia
- Mathematic for Bridging Student, CELPAD

2008-2010   International Islamic University Malaysia (IIUM) Selangor, Malaysia
- Internet Application for Bridging Student, CELPAD

2007-2008   International Islamic University Malaysia (IIUM) Selangor, Malaysia
- College Mathematic for Bridging Student, CELPAD

INTERESTED SUBJECTS

- Database Management System
- Wireless Communication and Mobile Computing
- Information Management
- Parallel and distributed System
- Computer System Performance Evaluation
- Computer Skill
- Internet Application
- System Analysis & Design
- Human Computer Interaction
- Software Engineering
- Image Processing
- Data Structure Programming
- Academic Writing
- Research Methodology

CERTIFICATES PROFESSIONAL EXPERIENCE

Period	Position	Activities/clubs/societies
2021 to present	College vice dean coordinator	College vice dean coordinator for academic affairs
2021 to present	CS Department coordinator	Computer Science department coordinator
2021 to present	College vice dean coordinator	College vice dean coordinator for academic affairs
2021 to present	College Council Secretary	College Council Secretary (preparing meeting minutes)
2019 - 2021	Head department	Head department of Information System
01 January 2018	Member	Exams result checking committee, College of Computing and Information Technology, Shaqra University
15 October 2017	Member	Courses equivalent method committee, College of Computing and Information Technology, Shaqra University
07 December 2017	Member	Quality committee, College of Computing and Information Technology, Shaqra University
21 September 2016	Member	Programming committee, College of Computing and Information Technology, Shaqra University
21 September 2016	head	Database committee, College of Computing and Information Technology, Shaqra University
21 September 2016	Member	Graduation projects committee, College of Computing and Information Technology, Shaqra University
21 September 2016	Secretary	Secretary of the Council, College of Computing and Information Technology, Shaqra University
21 September 2016	Member	Exams committee control, College of Computing and Information Technology, Shaqra University
21 September 2016	Member	Students' Discipline committee, College of Computing

		and Information Technology, Shaqra University
04 January 2016	Member	Media Committee for Visual Production, Shaqra University
28 August 2016	Participant	Quality Workshop: Applying quality parameters in education methods, Deanship of Development and Quality, Shaqra University.
6 April 2015	Member	IT Team at Deanship of Information Technology and E – Learning, Shaqra University
21 April 2015	Participant	Quality Workshop: Basic of applying quality system in educational institutions, Deanship of Development and Quality, Shaqra University.
28 October 2014	Member	IT Team at Deanship of Information Technology and E – Learning, Shaqra University
25 March 2011	Participant	Refworks Workshop, School of Graduate *Studies (UPM)*
31 March 2011	Participant	Enhancing Presentation Skills Seminar, School of Graduate Studies (UPM)
20 October 2010	Participant	Scientific writing seminar, School of Graduate Studies (UPM)
26 September 2010	Participant	UPM E-Charity Run 2010, Fakulti Kejuruteraan, (UPM)
22 September 2010	Participant	English for Publishing Seminar, School of Graduate Studies (UPM)
23 September 2010	Participant	Guide to Thesis Writing Seminar, School of Graduate Studies (UPM)
10 August 2010	Participant	Presentation Skills Seminar, School of Graduate Studies (UPM)
21 – 22 November 2009	Participant	Publishing for Postgraduate workshop, School of Graduate Studies (UPM)
17 July 2009	Participant	International Student Carnival 2009- Sports Festival organized by Ministry of Higher Education Malaysia, Sunway University College
7 - 8 January 2006	Participant	Games 06- Futsal Tournament
14 January 2005	Participant	Celebrating Sudanese Independence Day
23 - 26 November 2004	Committee	Ta'aruf Week November 2004/2005 Intake International Islamic University Malaysia
7- 12 July 2003	Committee	Quranic Language Week 2003, Ummul Qura Society, International Islamic University Malaysia

TRAINING EXPERIENCE

9-16 November 2018	ScholarsPro Trining: Completion of 30- hours classroom training program on **Data Science With R** held in Riyadh, Saudi Arabia.
19 - 21 April 2015	Naseej Training: Introduction to E-learning, E-learning Environment, E-content Management, Electronic Exams, That held at Shaqra University.
10th April 30th June 2006	Software Engineer Trainee, Ikram Solutions Sdn. Bhd, Kuala Lumpur, Malaysia

27th January 2006	PHP programming, Centre for IT Advancement (CITA), IIUM.
16th December 2005	Web Design & Development, (Adobe Photoshop CS, Dreamweaver MX2004 & PHP/MySQL Modul), Centre for IT Advancement (CITA), IIUM.

CONFERENCE, AWARDS, AND RECOGNITIONS

- February, 2015, *Reviewer* at Elsevier Editorial System for Journal of Network and Computer Applications.
- January, 2014, *Reviewer at* Journal of Convergence Information Technology.
- December, 2014, *Reviewer* at International Journal of Sensors, Wireless Communications and Control.
- February, 2014, *Reviewer* at Journal of Computer Engineering & Information Technology.
- 17th -19th July 2012, *Silver Medal Award* for the Invention/ Innovation of "Collaborative Caching Priority For Servicing Continuous Query In Mobile Database" Pameran Reka Cipta, Penyelidikan Dan Inovasi Malaysia 2012. Organized by Pusat Kebudayaan dan Kesenian Sultan Salahuddin Abdul Aziz Shah, UPM Serdang.
- 14th – 16th November 2011, *Reviewer* at International Conference on Information Technology and Multimedia, organized by College of Information Technology, University of Tenaga Nasional (UNITEN), Malaysia.
- 27th – 29th June 2011, Reviewer at The Second International Conference on Software Engineering and Computer System (ICSECS2011), organized by Universiti Malaysia Pahang, Kuantan, Malaysia.
- 2^{5th} – 2^{7th} May 2010, Knowledge Management International Conference 2010 (KMICe2010), Primula Beach Resort, Kuala Terengganu, Malaysia
- 15th – 17th June, 2010, Network Simulation Using NS-2 Workshop, International Symposium on Information Technology (ITSim'10), *Kuala Lumpur, Malaysia*
- 16th – 17th December 2008, The 4th Malaysian Software Engineering Conference, Fakulti Sains Dan Teknologi, Terengganu, Malaysia.
- Semester 1, 2006 -2007, The Best Undergraduate Final Year Project (System Development), Kulliyyah of Information and Communication Technology, International Islamic University Malaysia
- 29th July 2004, Islamic Conference on Muslim Youth and The Contemporary Challenges, Postgraduate Student Society, International Islamic University Malaysia

PROFESSIONAL SKILLS CALLIGRAPHY

Unified Modeling Language (UML), IBM Rational Rose.
Graphic Programs such as Corel Draw, Adobe Photoshop, and Paint Shop
Database Management such as Oracle, SQL Server 2000, and Ms Access
ASP Technology: Microsoft FrontPage, Microsoft Office, and Dream Weaver
Programming Languages: C, HTML and WML
Networking and Wireless Technology

PERSONAL CAPABILITIES

- Ability to Work Under Pressure and Meet Deadlines
- Ability to Make Decisions Quickly
- Effective Communicator
- Team Leader
- Future Planning
- Training and Instruction
- System Analysis
- Database Administration And Development
- Software Development
- Manage Discussion Groups

HOBBIES

Reading, Football, Jogging, Swimming, and Filming

LANGUAGES

- Arabic   : *Native language with professional skills*
- English   : *Very good reading, writing, and speaking*
- Bahasa Melayu: *good speaking and reading*

RESEARCH INTEREST

To contribute to the database management system field particularly in collaborative caching technique in mobile database environment by improving the performance of continues query process Software to fetch the desire data item with less response delay.
My research interest areas include collaborative caching, mobile database, and query processing.

PATENTS:

Title of the invention: "AUTOMATIC EFFICIENT SPACE PARKING MANAGEMENT SYSTEM FOR SMART CITIES" Indian Government Patent number: 202111022429, May 2021. https://ipindiaservices.gov.in/PublicSearch/PublicationSearch/ApplicationStatus

PUBLICATIONS

- Alanoud Al Mazroa, Mashael Maashi, Fadoua Kouki, Kamal M. Othman, Nahla Salih, **Mohamed Ahmed Elfaki**, Sabarunisha Begum S, "An analysis of urban sprawl growth and prediction using remote sensing and machine learning techniques", Journal of South American Earth Sciences, Volume 142, 2024.
- Al-onazi, B.B., Alzahrani, J.S., Alotaibi, N., Alshahrani, H., **Elfaki**, M.A. et al. (2024). Chaotic elephant herd optimization with machine learning for Arabic hate speech detection. Intelligent Automation & Soft Computing, 39(3), 567-583. https://doi.org/10.32604/iasc.2023.033835
- Duhayyim, Mesfer Al, Badriyya B. Al-onazi, Jaber S. Alzahrani, Hussain Alshahrani, **Mohamed Ahmed Elfaki**, Abdullah Mohamed, Ishfaq Yaseen, Gouse PashaMohammed, Mohammed Rizwanullah, and Abu Sarwar Zamani. "Multi-Versus Optimization with Deep Reinforcement Learning Enabled Affect Analysis on Arabic Corpus." Computer Systems Science & Engineering 47, no. 3 (2023).

- Alshahrani, Hussain, Mohammed Maray, Mohammed Aljebreen, Mofadal Alymani, **Mohamed Ahmed Elfaki**, Mesfer Al Duhayyim, Prasanalakshmi Balaji, and Deepak Gupta. "Energy aware routing with optimal deep learning based anomaly detection in 6G-IoT networks." Sustainable Energy Technologies and Assessments 60 (2023): 103494.
- **Elfaki, Mohamed Ahmed**, Mofadal Alymani, Z. Faizal Khan, Saad Ali Alahmari, and Sivaram Rajeyyagari. "Dynamic auto-configuration over node communication in mobile wireless networks." Soft Computing 27, no. 23 (2023): 18373-18381.
- Motwakel, Abdelwahed, Najm Alotaibi, Eatedal Alabdulkreem, Hussain Alshahrani, **Mohamed Ahmed Elfaki, Mohamed** K. Nour, Radwa Marzouk, and Mahmoud Othman. "Improved Metaheuristics with Deep Learning Enabled Movie Review Sentiment Analysis." Computer Systems Science & Engineering 47, no. 1 (2023).
- Al-onazi, Badriyya B., Najm Alotaibi, Jaber S. Alzahrani, Hussain Alshahrani, **Mohamed Ahmed Elfaki**, Radwa Marzouk, Mahmoud Othman, and Abdelwahed Motwakel. "Modified Dragonfly Optimization with Machine Learning Based Arabic Text Recognition." Computers, Materials & Continua 76, no. 2 (2023).
- **Elfaki, Mohamed Ahmed,** Haya Mesfer Alshahrani, Khalid Mahmood, Rana Alabdan, Mofadal Alymani, Hussain Alshahrani, Abdelwahed Motwakel, and Amani A. Alneil. "Metaheuristics Algorithm-Based Minimization of Communication Costs in Federated Learning." IEEE Access (2023).
- Alymani, Mofadal, Hanan Abdullah Mengash, Mohammed Aljebreen, Naif Alasmari, Randa Allafi, Hussain Alshahrani, **Mohamed Ahmed Elfaki**, Manar Ahmed Hamza, and Amgad Atta Abdelmageed. "Sustainable residential building energy consumption forecasting for smart cities using optimal weighted voting ensemble learning." Sustainable Energy Technologies and Assessments 57 (2023): 103271.
- Al-onazi, Badriyya B., Mohamed K. Nour, Hussain Alshahran, **Mohamed Ahmed Elfaki**, Mrim M. Alnfiai, Radwa Marzouk, Mahmoud Othman, Mahir M. Sharif, and Abdelwahed Motwakel. "Arabic Sign Language Gesture Classification Using Deer Hunting Optimization with Machine Learning Model." Computers, Materials & Continua 75, no. 2 (2023).
- Alshahrani, Hussain, **Mohamed Ahmed Elfaki**, Hamidah Ibrahim, and Nawfal Ali. "Collaborative caching discovery management in mobile ad hoc networks environments." PeerJ Computer Science 9 (2023): e1320.
- Alshahrani, Hussain, Amnah Alshahrani, and **Mohamed Ahmed Elfaki**. "Investigating the Factors Influencing the Use of Cloud Computing." (2022).
- Ahmed Hamza, Manar, Hamed Alqahtani, Dalia H. Elkamchouchi, Hussain Alshahrani, Jaber S. Alzahrani, Mohammed Maray, **Mohamed Ahmed Elfaki**, and Amira Sayed A. Aziz. "Hyperparameter Tuned Deep Autoencoder Model for Road Classification Model in Intelligent Transportation Systems." Applied Sciences 12, no. 20 (2022): 10605.
- Sarfraz, Mubashar, Haya Mesfer Alshahrani, Khaled Tarmissi, Hussain Alshahrani, **Mohamed Ahmed Elfaki**, Manar Ahmed Hamza, Ali Nauman, and Tahir Khurshaid. "Intelligent Reflecting Surfaces Enhanced Mobile Edge Computing: Minimizing the Maximum Computational Time." Sensors 22, no. 22 (2022): 8719.
- Alshahrani, Hala J., Khaled Tarmissi, Hussain Alshahrani, **Mohamed Ahmed Elfaki**, Ayman Yafoz, Raed Alsini, Omar Alghushairy, and Manar Ahmed Hamza. "Computational Linguistics with Deep-Learning-Based Intent Detection for Natural Language Understanding." Applied Sciences 12, no. 17 (2022): 8633.
- Wahaballa, Abubaker, Zhiguang Qin, Hisham Abdalla, Majdi Abdellatief, and **Mohamed A. Elfaki**. "Oblivious transfer with hidden access control and outsourced decryption from

deterministic finite automata-based functional encryption for an in-vehicle sensor database system." Transactions on Emerging Telecommunications Technologies (2020): e3870.

- **Mohamed Ahmed Elfaki,** Majdi Abdellatief, Ali A. Alwan, and Abubaker Wahaballa, "A Literature Review on Collaborative Caching Techniques in MANETs: Issues and Methods used in Serving Queries", ***Engineering, Technology & Applied Science Research*** (ETASR) Vol. 9, No. 5, :4729-34.2019.
- Sellami Ali, Majdi Abdellatief, **Mohamed Ahmed Elfaki**, and Abubaker Wahaballa," Complexity Metrics for Component-based Software Systems: Developer Perspective",Indian Journal of Science and Technology, Vol. 11(32), DOI:10.17485/ijst/2018/v11i32/123093,August 2018.
- **Mohamed A. Elfaki**, Hamidah Ibrahim, Ali Mamat and Mohamed Othman," Collaborative Caching Architecture for Continuous Query in Mobile Database", *American Journal of Economics and Business Administration,* Volume 3, Issue 1, Pages 33-39, 2011, DOI: 10.3844/ajebasp.2011.33.39
- **Mohamed A. Elfaki**, Hamidah Ibrahim, Ali Mamat and Mohamed Othman," Collaborative Caching for Distributed Mobile Database Query Processing", Proceedings of Knowledge Management International Conference & Exhibitions (KMICe2010)-ISI Indexed Proceedings, 31-05-2010, ISBN 978-983-2078-39-5, Printed Hardcopy.
- **Mohamed A. Elfaki**, Hamidah Ibrahim, Ali Mamat and Mohamed Othman," Service Differentiation for Collaborative Caching Query Process in Mobile Database", Proceedings of the 5th Malaysian Conference in Software Engineering 2011**,** Pages 429-433, IEEE publication.
- **Mohamed A. Elfaki**, Hamidah Ibrahim, Ali Mamat and Mohamed Othman "Collaborative Caching Priority for Processing Requests in MANETs" , Elsevier - Journal of Network and Computer Applications, 27 September 2013, (Impact Factor: 6.281).

REFEREES

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