

# Mohamed Izzeldin A. Bashir

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**Nationality: Sudanese** 

## **Professional Summary:**

Accomplished academic leader with over 21 years of experience in various leadership roles, including 7 years as a dean, 1 year as a deputy dean, 10 years as a department head, and significant experience in the faculty. Currently serving as the Head of the Department for Management Information Systems at A'Sharqiyah University's College of Business Administration in Oman. Holds a PhD in Computer Science and master's degrees in information technology and business administration (MBA).

#### **Key Achievements:**

- Served as the Dean of the Faculty of Computer Science and Information Technology at The University of Medical Sciences & Technology.
- Published 19 peer-reviewed research articles in reputable journals and conferences. Led curriculum development projects for more than 20 core courses across various disciplines.
- Co-founded the Sudanese Customs Sciences Academy, encompassing customs sciences, economics, and information technology.
- Acted as a technical member of the committee responsible for reviewing and approving undergraduate and
  postgraduate academic programs in computer science and related disciplines by the Ministry of Higher
  Education and Scientific Research in Sudan.
- Played a pivotal role in founding several colleges across Sudanese universities, including the Faculty of Business Administration and Faculty of Biomedical Engineering at the University of Medical Sciences and Technology, and the Faculty of Computer Science at the University of Holy Quran.
- Spearheaded community outreach programs, providing digital literacy training to over 300 youths annually.
- Served as a key member of the committee responsible for allocating Korean scholarships to top-performing students in Sudanese computing faculties.

## **KEY SKILLS**

**Leadership**: Proficient in building and leading high-performing teams to achieve desired outcomes. Adept at motivating and inspiring team members to enhance productivity.

**Decision-Making**: Strong analytical and strategic skills for evaluating options, assessing risks, and making timely, well-informed decisions.

**Resource Management**: Demonstrated ability to efficiently oversee budgets, materials, technologies, and human resources to meet program objectives.

**Partnership Development**: Exceptional relationship management skills enable the establishment of mutually beneficial partnerships with industry, government, and community organizations.

**Quality Assurance**: Skilled in developing and implementing rigorous processes to ensure program excellence per accreditation standards.

**Innovation**: Forward-thinking with a passion for employing innovative pedagogical approaches, technologies, and assessment techniques.

**Communication**: Outstanding verbal and written communication skills, facilitating effective collaboration with diverse internal and external stakeholders.

## ACADEMIC QUALIFICATIONS

Qualification	Date	Major	Institution	Country
Ph.D.	27-02-2012	Computer Science	Chungbuk National University	South Korea
MBA	17-01-2008	Business Administration Science, in Marketing Management specialization.	University of Medical Sciences & Technology	Sudan
M.Sc.	21-09-2003	Computer Science and Information	University of Gezira	Sudan
Postgraduate Diploma	22-06-2003	Computer Science	University of Gezira	Sudan
B.Sc.	20-07-1997	Economic & Administrative Sciences (Business Administration)	Omdurman Ahlia University	Sudan

## PROFESSIONAL QUALIFICATIONS

Title	Institution / University	From	То
WIPO-Script Training Program on Intellectual Property For Small and Medium-Sized Enterprises	The World Intellectual Property Organization WIPO (Geneva)	25/11/2008	28/11/2008
Information Visualization for High-Dimensional Data	Chungbuk National University (South Korea )	11/8/2008	22/8/2008
Intensive Course in Data Mining	Chungbuk National University (South Korea )	31/7/2008	11/8/2008
Diploma in Technical Financial Accounting	Abdeen Computer Science and Technical Studies Institute (Sudan)	01/03/1997	30/09/1997

#### PROFESSIONAL EXPERIENCE

1. **Head of Department and Assistant Professor-** Management Information Systems A'Sharqiyah University, Oman

Feb 2020 - Present

#### 1.1 Duties

- Spearheading the Department of Management Information Systems.
- Overseeing team members and resources efficiently.
- Leading curriculum development initiatives.
- Delivering instruction for undergraduate and graduate courses.
- Conducting research activities and guiding student projects.

## 1.2 Achievements:

- Successfully expanded the department's faculty by recruiting two new lecturers.
- Achieved an 85% increase in student enrollment within the department in 2023. Developed and modernized the curriculum for Management Information Systems.
- Played a key role in the launch of the bachelor's program in Internet and Information Technology.
- Led the development team for the Bachelor's Data Science and Business Analytics program.
- Obtained accreditation for the bachelor's programs in Management Information Systems and Internet and Information Technology from the Oman Ministry of Education, meeting Educational Qualification requirements.
- Actively contributed to various college and university committees.

# 2. Dean of Faculty of Computer Science and Information Technology University of Medical Sciences & Technology, Sudan.

- **Associate Professor** November 2016 Feb 2020
- Assistant Professor July 2013 November 2016

#### 4.1 **Duties**

- Provided visionary leadership for the Faculty, overseeing all operations.
- Developed academic programs and curricula aligned with industry and accreditation requirements.
- Recruited, managed, and mentored faculty members to ensure the delivery of high-quality teaching and research.
- Established an Advisory Board for the Faculty and fostered partnerships with industry stakeholders.
- Ensured program accreditation and secured recognition from professional bodies.
- Enhanced experiential learning through industrial attachments and internships.
- Managed student admissions, progression, and graduation processes.
- Efficiently allocated budgets, managed staff, and optimized resources for operational excellence and sustainability.
- Contributed to university-wide academic policymaking and strategic planning.
- Cultivated a collaborative culture of innovation and excellence across the faculty.
- Led and promoted research activities among faculty members, fostering research partnerships.
- Represented the Faculty at conferences, events, and external forums.
- Formulated procedures to implement established policies and regulations.
- Served as a member of the university senate, contributing to educational policies, general welfare, and more.
- Shared responsibility in matters including scholastic policies, faculty tenure, budgets, and academic assessments.
- Headed the faculty total quality committee, ensuring high standards and continuous improvement in teaching, research, and resource management.
- Upheld the highest levels of quality, integrity, and ethics in all research endeavors.
- Cultivated a dynamic research environment for both staff and students.
- Framed policies and procedures to support academic assessment processes.
- Assisted academic units in assessing student learning and development.
- Invited qualified personnel to enhance teaching methodology.
- Explored opportunities for knowledge transfer activities, securing additional income streams and expanding teaching and research areas.
- Led the faculty accreditation committee, working toward academic accreditation from national and international bodies.
- Contributed as a member of the deanship of scientific research, supporting multidisciplinary research for faculty and students.

#### 4.1 Achievements

- Successfully launched the M.Sc. program in Information Systems.
- Played a pivotal role in establishing and developing the College of Business Administration.
- Modified and updated the undergraduate curriculum.
- Contributed to setting the rules and regulations for both undergraduate and postgraduate programs.
- Participated in recruitment and interview committees for scholars and senior staff selection.
- Implemented the IT policy for the university.

## Deputy Dean and Assistant Professor Faculty of Computer Science and Information Technology, University of Medical Sciences & Technology, Sudan March 2012 – July 2013

#### 4.1 Duties:

- Prepared and delivered lectures to undergraduate and graduate students.
- Supervised and counseled students on theoretical and practical activities.
- Evaluated and graded students' classwork, laboratory performance, assignments, and papers.
- Prepared course materials, including syllabi, homework assignments, and handouts.
- Planned, evaluated, and revised curricula, course content, and instructional methods.
- Supervised undergraduate and graduate teaching, internships, and research activities.
- Participated in various committees tasked with defining the university's teaching policies.
- Guided students in their graduation projects.
- Designed curricula and contributed to the development of computer science programs and courses across different faculties at the University of Medical Sciences and Technology.

#### 4.1 Achievement

- Steered the Faculty's accreditation efforts, resulting in the successful accreditation of three undergraduate programs by Sudan's Ministry of Higher Education and Scientific Research.
- Expanded student internship and placement partnerships with 30 top technology companies in the region.
- Provided academic leadership for a team of 75 faculty members spanning eight departments and programs.
- Implemented an interdisciplinary project-based learning initiative involving 150 students.

# 4. Lecturer, Faculty of Computer Science, and Information Technology University of Medical Sciences & Technology, Sudan.

September 2002 – March 2012

#### 4.1 Duties:

 Delivered lectures and conducted tutorial sessions for assigned courses according to the academic calendar.

- Developed course content and identified relevant learning resources and academic references.
- Designed lesson plans and assessment methods in alignment with course learning outcomes.
- Evaluated student progress and academic performance through assignments and examinations.
- Provided academic and career guidance to students during consultation hours.
- Actively participated in departmental and college committees and activities.
- Conducted research and studies in the field of specialization, publishing research findings.
- Offered consulting services based on expertise.
- Attended academic events and conferences relevant to the field.
- Maintained continuous professional development by updating knowledge and skills to remain current in the field of specialization.
- Adhered to institutional policies of teaching, research, academic integrity, and student conduct.

#### **CONSULTANCY:**

Worked as a Consultant and Advisor for Various Projects:

#### **University of Medical Sciences & Technology:**

• Collaborated on projects sponsored by the University of Medical Sciences & Technology in Sudan, benefiting the university directly or serving as a second party in partnership with authorities such as the Sudanese Ministry of Health.

#### **Hash Information Technology:**

- Engaged in consultancy work with Hash Information Technology, a provider of software solutions to numerous civil society organizations, both in the private and public sectors.
- Contributed to the development of the company's product, "Edu. Pro," designed to serve educational institutions. The product has been successfully adopted by several Sudanese universities, including the University of Khartoum and others.
- Played a key role in the development of the company's products, "Erp. Pro" and "Pharma. Pro," which are tailored IT solutions for managing operations in pharmaceutical manufacturing and trading companies. These solutions were effectively implemented by multiple clients in the pharmaceutical sector across Sudan.

## PROFESSIONAL SOCIETY ACTIVITIES

#### Keynote Speaker

Highlighted as a Keynote Speaker at Various International Conferences and Workshops:

- The Sixth International Conference on Frontiers of Information Technology, Applications, and Tools
  - Hosted by Chungbuk National University
  - Topic: "Self-motivated Learning Grounds Competence in Real-Time Cardiac Arrhythmia Detection"
  - Location: Cheongju, South Korea
  - Dates: September 25 28, 2013.
- International Workshop on the Applications of Database and Bioinformatics.
  - Jointly organized and hosted by CBNU's Research Institute for Computer and Information Communication and the Database Group
  - Topic: "Healthcare Process Mining: Overview, Challenges, and Solutions"
  - Location: South Korea.
  - Dates: November 1 8, 2016.
- International Workshop on the Applications of Database and Bioinformatics.
  - Jointly organized and hosted by CBNU's Research Institute for Computer and Information Communication and the Database Group.
  - Topic: "Dynamic Learning Techniques for Data Mining"
  - Location: Cheongiu, South Korea
  - Dates: November 1 8, 2016

## **Curriculum Development and Related Activities**

- Served as the team chairman for the development of the entire B.Sc. (Honors) program in Computer Science, Information Technology, and Information Systems for the Faculty of Computer Science and Information Technology at the University of Medical Sciences and Technology in 2016.
- Solely designed and developed the curriculum for the Master of Information System program with
  three specializations (Business, Medical, and Geographical) at the University of Medical Sciences
  and Technology. This involved creating the entire curriculum and supplementary pedagogical
  materials for 30 courses (10 for each specialization) in 2015.
- Solely designed and developed the curriculum for the Higher Diploma in Information Systems at the University of Medical Sciences and Technology in 2015. This included specifying the appropriate courses (10 courses) and writing their descriptions.

- Contributed as a team member to the development of the entire B.Sc. program in Information Technology at the National Academy of Customs Science & Technology in 2014.
- Solely developed the curriculum for the B.Sc. undergraduate course in "Management Information Systems," which you taught at the University of Medical Sciences and Technology from 2012 to 2019.
- Solely developed the curriculum for the M.Sc. graduate course in "Management Information Systems," which you taught at the University of Medical Sciences and Technology from 2012 to 2019.
- Solely developed the course material for the Ph.D. graduate course in "Knowledge Management" that you taught at the University of Medical Sciences and Technology from 2017 to 2019.
   Completely developed the course material for the Ph.D. graduate course in "Process Management" that you taught at the University of Medical Sciences and Technology from 2017 to 2019.

#### Reviewer

I have served as a reviewer for numerous papers submitted to several international conferences, including the "International Conference on Frontiers of Information Technology, Applications, and Tools". Additionally, I have contributed as a reviewer for various national and international journals, including:

- Journal of Ambient Intelligence and Humanized Computing (Springer)
- IEEE Transactions on Information Technology in Biomedicine
- Springer Lecture Notes in Computer Science
- Cluster Computing (CLUS)
- Journal of Sudan University for Science and Technology
- Journal of the Open University of Sudan

## External Examiner:

I have served as an external examiner for a wide range of academic programs, evaluating the quality and rigor of postgraduate theses and contributing to the examination process. My extensive experience includes:

- Evaluated 32 M.Sc. Theses in Computer Science, Information Technology, and Information Systems at the University of Science and Technology.
- Evaluated 12 M.Sc. Theses in the Master of Banking Information System program at the Sudan Academy for Banking and Financial Sciences.

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• Evaluated 25 M.Sc. Theses in Computer Science, Information Technology, and Information System programs at the Open University of Sudan.

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• Evaluated 12 M.Sc. Theses in the MBA program at Sudan University for Science and Technology.

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• Evaluated 3 M.Sc. Theses in the M.Sc. program at the Faculty of Computer Studies, National Ribat University, Khartoum, Sudan.

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• Evaluated several B.Sc. level theses at different universities in Sudan, including the University of Medical Science and Technology, Sudan University for Science and Technology, Alnilin University, and the Open University of Sudan.

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Contributed to the establishment of the examination bank for postgraduate-level programs
at the Open University of Sudan in 2015. This involved subjects such as Management
Information Systems (Master), Electronic Commerce (Master), Software Project
Management (Master), Information Systems (Master), Object-Oriented Programming
(Master), Software Testing (Master), Management Information System (Higher Diploma),
and Object-Oriented Programming (Higher Diploma).

#### RESEARCH INTERESTS

My research interests encompass a diverse array of areas within computer science, including machine learning, deep learning, dynamic learning, process mining, ubiquitous computing, stream data processing, bioinformatics, biomedicine, and knowledge-based information retrieval. My primary focus is on advancing data retrieval and exploration techniques to enhance the effectiveness, efficiency, and robustness of emerging applications.

#### **PUBLICATIONS**

## Papers in Refereed Journals

- 1. <u>Bashir MEA</u>, Lee DG, Akasha M, Yi GM, Cha EJ, Bae JW, et al. Highlighting the current issues with pride suggestions for improving the performance of real-time cardiac health monitoring. Lect Notes Comput Sci (including Subser Lect Notes Artif Intell Lect Notes Bioinformatics). 2010;6266 LNCS:226–33.
- 2. <u>Bashir MEA</u>, Lee DG, Li M, Bae JW, Shon HS, Cho MC, et al. Trigger learning and ECG parameter customization for remote cardiac clinical care information system. IEEE Trans Inf Technol Biomed. 2012;16(4):561–71.
- 3. **Bashir MEA**, Ryu KS, Park SH, Lee DG. Pro-detection of Atrial Fibrillation with ECG Parameters

- Mining Technique. Advances in Control and Communication. 2012;717–724.
- 4. <u>Bashir MEA</u>, Ryu KS, Park SH, Lee DG, Bae JW, Shon HS, et al. Superiority real-time cardiac arrhythmias detection using trigger learning method. Lect Notes Comput Sci (including Subser Lect Notes Artif Intell Lect Notes Bioinformatics). 2011;6865 LNCS:53–65.
- 5. **Bashir MEA**, Shon HS, Lee DG, Kim H, Ryu KH. Real-time automated cardiac health monitoring by combination of active learning and adaptive feature selection. KSII Trans Internet Inf Syst. 2013;7(1):99–118.
- 6. **Bashir MEA**, Ryu KS, Yun U, Ryu KH. Pro-Detection of Atrial Fibrillation using a Mixture of Experts.IEICE Transactions on Information and Systems2012;(12):2982–2990.
- 7. Lee DG, Ryu KS, <u>Bashir M</u>, Bae J-W, Ryu KH. Discovering Medical Knowledge using Association Rule Mining in Young Adults with Acute Myocardial Infarction. J Med Syst. 2013;37(2):9896.
- 8. Ryu KS, Park HW, Park SH, Shon HS, Ryu KH, Lee DG, <u>Bashir M</u>, et al. Comparison of clinical outcomes between culprit vessel only and multivessel percutaneous coronary intervention for ST-segment elevation myocardial infarction patients with multivessel coronary diseases. J Geriatr Cardiol. 2015;12(3):208–17.
- 9. Abdel Fattah, Fadi & Mohamed, A H H & **Bashir M.E.A** & Al Alawi, Abrar. Determinants of Knowledge-Sharing Behaviour Amongst Students at Higher Educational Institutions in Oman: A Planned Behaviour Theoretical Perspective of Knowledge Sharing. Global Knowledge Memory and Communication. Vol. 70 No. 6/7, 2020, pp. 611-636.
- 10. **Bashir MEA**, Mohamed A.H.H.M., Khanan A., Fattah F.A.M.A., Wang L., Ryu K.H. Cache Learning Method for Terrific Detection of Atrial Fibrillation. Advances in Intelligent Information Hiding and Multimedia Signal Processing 2021, pp 512-519
- Mohamed, A.H.H.M., Abdel Fattah, F.A.M., **Bashir M.E.A.**, Khanan A., Maia Alhajri, Zaheer Abbas, Investigating the acceptance of distance learning amongst Omani students: a case study from Oman, Global Knowledge, Memory, and Communication, Accepted for publication (currently in archiving process). Vol. 71 No6/7. 2021, pp 529-549.
- 11. Dina A. Salih, yasir A. Mohamed, **Mohamed Bashir**, Enhancing Intrusion Detection System Performance Against Low Frequent Attacks Using Fc-Ann Algorithm, Journal of Engineering Science and Technology, Vol. 18, No. 5, 2023, pp 2411 2431

#### Papers in Refereed Conferences

- 1. <u>Bashir MEA</u>, Lee DG, GyoyongSohn, Ryu KH. Detecting Cardiac Arrhythmia using Remote Sensor Networks: Technologies Methods and Problems. In 2nd International Conf FITAT Chanjue, South Korea. 2009.
- 2. <u>Bashir MEA</u>, Akasha M, Lee DG, Yi G, Ryu KH, Cha EJ, et al. Nested Ensemble Technique for Excellence Real Time Cardiac Health Monitoring. In Int Conf Bioinforma Comput Biol BIOCOMP 2010, July 12-15, 2010, Las Vegas Nevada, USA. 2010;519–25.
- 3. <u>Bashir MEA</u>, Akasha M, Lee DG, Yi GM, Ryu KH. The 3rd International Conference FITAT 2010 Organizing the ECG Classifier's Training Dataset with Ensemble Framework. In the 3rd

- International Conf FITAT 2010Yanji, China. 2010;1–5.
- 4. Lee DG, Yi Gyeong, Ryu KS, <u>Bashir MEA</u>, Ryu KH. The 8th Asian Symposium on Geographic Information Systems from a Computer Science & Engineering Viewpoint ASGIS 2010, Chongqing, China April 22-24 2010.
- 5. <u>Bashir MEA</u>, Yi GM, Piao M, Shon HS, Ryu KH. Fine-tuning ECG Parameters Technique for Precise Abnormalities Detection. In International Conf on Bioscience, Biochemistry and Bioinformatics ICBBB 2011;5:305–309.
- 6. <u>Bashir MEA</u>, Lee DG, Piao Minghao, Shon HS, Ryu KH.Crucial ECG Parameters for PreciseAtrial FibrillationRevealing. In the 4th International Conf FITAT 2011, Chanjue, South Korea.
- 6. <u>Bashir MEA</u>, Lee DG, Ishag IM, Okasha M, Sun H, Ryu KH. Adeptness Associative Learning Method for Real-Time Cardiac Arrhythmia Detection. The 4th International Conf FITAT Chiang Mai, Thailand2014;9–13.
- 7. **Bashir MEA**, Ishaq IM, Okasha M, Ryu KS, Ho S, Ryu KH. Endoscopy Transmissions System for Remoteness Medical Diagnoses. The 5th International Conf FITAT Jilin, China 2015;125–129.
- **8.** Mohamed Ezzeldin A. Bashir, Akbar Khanan, Yasir Mohamed Abdulgadir, Abdul Hakim H. M. Mohamed, Senthilkumar Moorthy, and Keun Ho Ryu, Unlocking Insights: Empirical Exploration of ECG Databases for Enhancing Arrhythmias Detection using Deep learning, The 15th International Conf FITAT Ulaanbaatar, Mongolia, 2023; 99-104.

#### **AWARDS**

- 1. <u>Best Paper</u> award in The 4th International Conference FITAT 2011, Chanjue, South Korea. Mohamed Ezzeldin A. Bashir, Dong Gyu Lee, Minghao Piao, Ho Sun Shon, Keun Ho Ryu,"Crucial ECG Parameters for PreciseAtrial FibrillationRevealing".
- 2. The Second Prize young Scientist award at the PT-ERC Symposium Republic of Korea.

## **Languages Skills**

Language Name	Speaking	Writing	Reading
Arabic	Advanced	Advanced	Advanced
English	Advanced	Advanced	Advanced
Korean	Basic	Basic	Basic

## References

## • Keun Ho Ryu, Professor

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#### • Goutam Chakraborty, Ph.D

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