A'aeshah Alhakamy, Ph.D.
د. عائشة عبدالله مقبول الحكمي

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🌐 Personal Website   in A'aeshah Alhakamy

Education

2017-2020	🔖	**Ph.D., in Computer Science.** *Purdue University,* Indianapolis, USA. Thesis title: *Extraction and Integration of Physical Illumination in Dynamic Augmented Reality Environments.* 🔗 https://doi.org/10.25394/PGS.12950315.v1
2015-2016	🔖	**M.Sc., in Computer Science.** *Purdue University,* Indianapolis, USA.
2001-2005	🔖	**B.Sc., in Computer Science.** *Taibah University,* Medina, Saudi Arabia.

Appointments

Dec 2024 - Present	🔖	**Associate Professor** of Computer Science, Faculty of Computers and Information Technology at the University of Tabuk. Specialized in Computer Graphics, Computer Vision, Visualization, Imaging, and Extended Reality.
Nov 2024 - Present	🔖	**Deputy Supervisor** of Data Governance Unit, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.
Sep 2023 - Present	🔖	**Vice Chair** of the Standing Executive Committee for Data Management and Governance, of Data Governance Unit, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.
Aug 2023 - Present	🔖	**Data Management Officer** of Data Governance Unit, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.
Jun 2023 - Dec 2023	🔖	**Erasmus+ Liaison Officer** Research and Consulting Institute, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.
May 2023 - Present	🔖	**Member** of the Computer Science Department Council, Faculty of Computers and Information Technology at the University of Tabuk.
May 2021 - May 2023	🔖	**Member** of the Information Technology Department Council, Faculty of Computers and Information Technology at the University of Tabuk.
Jan 2023 - Present	🔖	**Researcher** at the Artificial Intelligence and Sensing Technologies (AIST) Center, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk
Dec 2022 - Present	🔖	**Member** of the Permanent Committee Supervising Social Responsibility Activities, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.
Apr 2021 - Dec 2024	🔖	**Assistant Professor** of Computer Science, Faculty of Computers and Information Technology at the University of Tabuk. Specialized in Computer Graphics, Computer Vision, Visualization, Imaging, and Extended Reality.
Jan 2023 - Aug 2023	🔖	**Supervisor of Academic Affairs** of Computer Science Department, Faculty of Computers and Information Technology at the University of Tabuk.
Jan 2022-Present	🔖	**The Saudi Federation For Cybersecurity, Programming, and Drones Liaison Officer** Research and Consulting Institute, Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.

Appointments (continued)

Jan 2021 - Jan 2023   **Deputy Director** of the Industrial Innovation and Robotics Center (IIRC), Vice Rectorate for Postgraduate Studies and Scientific Research at the University of Tabuk.

Fall 2018- Fall 2020   **Graduate Research Assistant** of the Human-Computer Interaction Program at Indiana University @Indianapolis.

Fall 2017   **Graduate Teaching Assistant** of the Computer Science Department, School of Science at Purdue University @Indianapolis.

Dec 2009 - Apr 2021   **Teaching Assistant** of Computer Science, Faculty of Computers and Information Technology at the University of Tabuk.

2008   **Computer Instructor** at Modern Girl Institute for Computer and Languages and at several High Schools.

2007   **Secretary** at Taibah Charity Association in Madina.

Achievements

Awards

2024   **Excellence Award**, in the field of teaching and learning, the path of excellence in e-learning (National Excellence), University of Tabuk Excellence Award in its first distinguished session 1445 AH - 2024 AD. 🔗 Post

Outstanding Faculty Member Award, in Student Activities, Deanship of Student Affairs, University of Tabuk 🔗 Post

Outstanding Scientific Research Award, Web of Science Journal, Deanship of Scientific Research, University of Tabuk. For manuscript 🔗 `https://doi.org/10.1007/s11042-023-17598-7`

Outstanding Scientific Research Award, Web of Science Journal, Deanship of Scientific Research, University of Tabuk. For manuscript 🔗 `https://doi.org/10.3390/s23136024`

2023   **Outstanding Scientific Research Award**, Web of Science Journal, Deanship of Scientific Research, University of Tabuk. For manuscript 🔗 `https://doi.org/10.3390/sym15030699`

Outstanding Scientific Research Award, Web of Science Journal, Deanship of Scientific Research, University of Tabuk. For manuscript 🔗 `https://doi.org/10.3390/su15020911`

Incentive Reward for Distinguished Researchers, published with graduate students in Web of Science classified journal, Deanship of Scientific Research, University of Tabuk. For manuscript 🔗 `http://dx.doi.org/10.14569/IJACSA.2022.0131246`

2022   **President's Award for Outstanding Scientific Research Award**, in research and innovation for scientific and engineering track, University of Tabuk. 🔗 Post

2021   **Outstanding Scientific Research Award**, Web of Science Q_1 Journal, Deanship of Scientific Research, University of Tabuk. For manuscript 🔗 `https://doi.org/10.1145/3386496`

2020   **Travel Award**, Attend CHI conference from Dr Cafaro, NSF, and IUPUI Data Lab full support.

Achievements (continued)

2019   **Outstanding Scientific Research Award**, Publishing while a Ph.D. student from the Saudi Arabian Cultural Mission (SACM). For manuscript 🔗 `https://doi.org/10.1109/INFOCT.2019.8710982`

2018   **Travel Award**, Financial Fund to attend a conference title "Introduction to Academic Leadership" provided by the Saudi Arabian Cultural Mission (SACM) that includes travel and accommodation.

2016   **Master with high GPA Award**, Graduating a Master's degree with a high GPA from the Saudi Arabian Cultural Mission (SACM).

2013   **Scholarship**, Full Scholarship from the University of Tabuk and the Saudi Arabian Cultural Mission (SACM).

2005   **Honor Degree**, Graduating with honor degree, BSc in Computer Science from Taibah University.

Certifications

Oct 6-8, 2024   **The 6 Critical Practices For Leading A Team: Supervisory Leadership Path** Awarded by Deanship of Quality and Academic Accreditation in cooperation with Franklin Covey.

June 5, 2023   **Fundamentals of Developing and Building Policies and Legal Legislation** Awarded by the national data management office (NDMO).

July 24, 2021   **Hadoop Platform and Application Framework**. Awarded by University of California San Diego.

2018   **Introduction to Academic Leadership**. Awarded by the Saudi Arabia Ministry of Education.

Grants

Aug 2022 - May 2023   **Deanship of Scientific Research, University of Tabuk** Extended Reality (XR) Making Immersive Technologies in Training and Repair: The Key to Unlocking Industry 4.0, Role: PI, Grant#: S-1443-0002.

Jan 2019 - Dec 2020   **Directorate for Computer & Information Science & Engineering (NSF CISE)** CHS:Eager:Aiding Reasoning about Correlation and Causation, Role: RA, URL: 🔗 `https://app.dimensions.ai/details/grant/grant.7706397`, Grant#: 1848898

Mentoring (Research and Project Advisor)

Master Students

July 2022 - July 2023   **Hibah Q. Alatawi, Nouf M. Albalawi, Ghada H. Shahata, and Khulud A. Aljohani**, Thesis titled "Extended Reality (XR) making Immersive Technologies in Training and Repair: The Key to Unlocking Industry 4.0", Published Article "Augmented Reality-Assisted Deep Reinforcement Learning-Based Model towards Industrial Training and Maintenance for NanoDrop Spectrophotometer" on 🔗 `http://doi.org/10.3390/s23136024`

May 2021 - May 2022   **Shoroog Albalawi, Lama Alshahrani, Nouf Albalawi, and Reem Kilabi**, Thesis titled "An Iris Recognition and Authentication System Using Image Analysis and Artificial Intelligence Techniques", Published Article "A Comprehensive Overview on Biometric Authentication Systems using Artificial Intelligence Techniques" on 🔗 `http://dx.doi.org/10.14569/IJACSA.2022.0130491`

Mentoring (Research and Project Advisor) (continued)

Undergraduate Students

Aug 2024 - Present	**Raghad Alzahrani, Aryaf Almutiri, Raghad Alenzi, Mram Alzahrani, Lama Hamlan**, Capstone project titled "Smart coach"
Jan 2024 - Present	**Nour Mubarak, Bayader Al-Issa, Maryam Majrashi, Shawq Al-Fihmani, Nada Al-Adisani, Aseel Al-Atwi**, Capstone project titled "YUSR: A Mobile Application for Umra and Hajj in Makkah"
Aug 2022 - Feb 2023	**Shahad Alsufyani, Alanoud Albalawi, Maha Al-Shammari, Madawi Al-Anzi, Albatul Altoum, Maha Alenazi, and Alia alatawi**, Capstone project titled "Road Breakers"
	Heba Al-Balawi, Wejdan Al-Atwi, Batool Abdullah, Wadha Al-Hwaiti, Bayan Al-Atwi, Samah Alhawiti, Maryam Alatwi, and Razan Alatwi, Capstone project titled "UT Repository"
Aug 2021 - May 2022	**Renad Alsharafaa, Manar Albalawi, Awatef Alharthi, Njoud Alhazmi, Amal Aamri, and Razan Asiri**, Capstone project titled "Stay"
	Rana Alharbi, Hadeel Aljuhani, Ahad Aljohani, Abeer Albalawi, Ghada Albushi, and Rahaf AlAtwi, Capstone project titled "Student Club"

Gifted Students

July 2024 - Dec 2024	**Supervising Scientific Projects** for students participating in the National Science Olympiad - Creativity 2025 AD, from the General Administration of Education in Tabuk Region represented by Educational Affairs - Capacity Development Department - Gifted Students Department.
	Supervising and Support Scientific Projects for students participating in "Mawhiba" competition for National Science Olympiad - Creativity 2025 AD, from Tabuk International Schools.

University and Community Services

Keynote Speaker/Workshops

19 Sep 2024	**Technical Podcast - Deanship of Student Affairs**,, University of Tabuk, Saudi Arabia, Record an episode about "Digital fraud".
28 Jan - 1 Feb 2024	**Professional Center - Deanship of Student Affairs with Research and Consulting Institute**,, University of Tabuk, Saudi Arabia, Providing a 40 hours training program entitled "Cybersecurity Course" in cooperation with the King Abdulaziz Charitable Society and King Abdulaziz Model Schools.
9 Feb 2023	**Deanship of Scientific Research**, University of Tabuk, Saudi Arabia, A scientific seminar within the research hour initiative, Research entitled "Extended Reality (XR) Toward Building Immersive Solutions: The Key to Unlocking Industry 6.0" for the funded project with grant# S-1443-0002
8 Nov 2021	**Faculty of Computers and Information Technology** University of Tabuk, Saudi Arabia, Seminar entitled "Essential steps to create your own website"
16 Sep 2021	**Digital Giving Webinar, Ataa**, Seminar entitled "External scholarship and self-education to keep pace with digital transformation"
8 Sep 2021	**Faculty of Computers and Information Technology**, University of Tabuk, Saudi Arabia, Seminar entitled "Extraction and Integration of Physical Illumination in Dynamic Augmented Reality Environment"

Reviewer/Technical Committee

11-13 Nov 2024 — **The IEEE 2024, 11th International Conference on Control, Mechatronics and Automation (ICCMA 2024)**, will be held at Brunel University London, UK.

12-14 Jun 2024 — **The ACM International Conference on Interactive Media Experiences (IMX))**, held in Stockholm, Sweden.

1-3 Nov 2023 — **The IEEE 2023, 11th International Conference on Control, Mechatronics and Automation (ICCMA 2023)**, held at Campus Grimstad, University of Agder, Norway.

17 Dec 2022-present — **Multimedia Tools and Applications Journal**, Springer Nature Switzerland AG, Reviewer of 16 scientific manuscripts and keep going

18 Apr 2022-present — **International Journal of Human–Computer Interaction**, Taylor & Francis, London, UK, Reviewer of 2 scientific manuscript and keep going

13-16 Feb 2022 — **The ACM 2022, 16th International Conference on Tangible, Embedded and Embodied Interaction (TEI)**, KAIST, Daejeon, South Korea

30 Nov-2 Dec 2021 — **The IEEE 2021, 2nd International Conference on Computing and Information Technology (ICCIT)**, at the University of Tabuk, Saudi Arabia

Ambassador

9 Feb 2023 — **Future Ambassadors Program at the Ministry of Communications and Information Technology**, Riyadh, Saudi Arabia, Presenting a workshop entitled: "Extended Reality (XR) Toward Building Immersive Solutions: The Key to Unlocking Industry 4.0"

12-20 Dec 2022 — **Future Ambassadors Program at the Ministry of Communications and Information Technology**, Riyadh, Saudi Arabia, Training an elite group of students in several different universities around the Kingdom on the technical curriculum of "Digital 101" course, providing six workshops for two hours each

15 Jan-20 Dec 2022 — **Future Ambassadors Program at the Ministry of Communications and Information Technology**, Riyadh, Saudi Arabia, Stanford Center for Professional Development Program: Digital 101, Attending six workshops for two hours each

Event Mentor/Judge

6 Nov 2024 — **BNG: to build innovative minds Challenge**, Deanship of Students Affairs, University of Tabuk, Saudi Arabia, Judge for BNG Challenge

5 Oct 2024 — **NASA International Space Apps Challenge**, Deanship of Students Affairs, University of Tabuk, Saudi Arabia, Judge for Space Apps Challenge

4 Feb 2024 — **|2|-Thon** Deanship of Student Affairs, University of Tabuk, Saudi Arabia, A Judge for Scientific Patents

18 and 28 Jan 2024 — **Princess Seetah Award** Deanship of Student Affairs, University of Tabuk, Saudi Arabia, A Substituted Judge for Sustainable Solutions

27 Jan 2024 — **2nd Global Game Jam** Google Developer Students Club, Deanship of Student Affairs, University of Tabuk, Saudi Arabia, A Judge of results

7 Oct 2023 — **NASA International Space Apps Challenge**, Deanship of Students Affairs, University of Tabuk, Saudi Arabia, Judge for Space Apps Challenge

2-5 Feb 2023 — **Xthon-2 event**, Deanship of Students Affairs, University of Tabuk, Saudi Arabia, Judge for Asynchronous Learning Track

University and Community Services (continued)

13-15 Sep 2022	**Global Game Jam** Google Developer Students Club, Deanship of Student Affairs, University of Tabuk, Saudi Arabia, A mentor to teams and Judge of results
3-7 Jan 2021	**Xthon-1 event**, Deanship of Student Affairs, University of Tabuk, Saudi Arabia, Teams Mentor for Sustainable Environment Applications Challenge

Presenter

30 Nov-2 Dec 2021	**The IEEE 2021 2nd International Conference on Computing and Information Technology (ICCIT)**, at the University of Tabuk, Saudi Arabia, Event presenter

Participant

19-20 Dec 2023	**Digital Governance Forum**, Riyadh, Saudi Arabia, Investigating methods of cooperation for the data management office at the University of Tabuk
13-14 Sep 2023	**The IEEE 2023 3rd International Conference on Computing and Information Technology (ICCIT)**, Grand Millennium, University of Tabuk, Tabuk, Saudi Arabia, Session chair and participant
1 Dec 2022–1 Jan 2023	**Digital Innovation Award of the Ministry of Communications and Information Technology**, hybrid (Riyadh and Online), Participant in scientific research "SARA for Diabetic Children" and attending workshops and a month-long training program
13-15 Sep 2022	**Research Partnership Day**, Grand Millennium, Vice Rectorate for Postgraduate Studies and Scientific Research, University of Tabuk, Participation in the session on protecting natural reserves
	Global Summit on Artificial Intelligence, Riyadh, Saudi Arabia, Attend conference activities by special invitation
19 Apr 2022	**International Education Conference and Exhibition**, in Riyadh, Saudi Arabia, Attending conference activities, some of the workshops held, and being in the university corner
1-3 Feb 2022	**LEAP 2022**, Riyadh, Saudi Arabia, Exploring cooperation for the Industrial Innovation and Robotics Center
22 Oct 2021	**The Knowledge Society Series in E-Learning workshop**, Deanship of E-Learning and Distance Education, University of Tabuk, Tabuk, Saudi Arabia, participate in discussions.

Teaching

Fall 2010 - First Semester 1431

CE 5 224	**Data Structure**, 3 lecture credit hours, Community Collage, Associate Diploma

Spring 2010 - Second Semester 1431

CSC 102	**Computer Programming 2**, 2 lab credit hours, CS Bachelor

Fall 2011 - First Semester 1432

DM 241	**Introduction to Computer**, 2 lecture, 2 lab credit hours, CS Bachelor
CSC 112	**Programming Languages**, 8 lab credit hours, CS Bachelor
CSC 109	**Computer Ethics**, 2 lecture credit hours, CS Bachelor

Spring 2011 - Second Semester 1432

CSC 101	**Computer Programming 1**, 2 lab credit hours, CS Bachelor
CSC 102	**Computer Programming 2**, 6 lab credit hours, CS Bachelor

Teaching (continued)

Fall 2012 - First Semester 1433

CSC 210   **Computer Organization with Assembly**, 6 lab credit hours, CS Bachelor

CSC 220   **Data Structure and Algorithms**, 4 lab credit hours, CS Bachelor

Spring 2013 - Second Semester 1433

CSC 101   **Theory of Computation** , 3 lecture credit hours, CS Bachelor

CSC 210   **Computer Organization with Assembly**, 2 lab credit hours, CS Bachelor

CSC 491   **Graduation Project**, 2 lab credit hours, CS Bachelor

Spring 2021 - Second Semester 1442

CSC 102   **Computer Programming 2**, 12 lecture, 2 lab credit hours, CS Bachelor

Fall 2021 - First Semester 1443

CSC 490   **Graduation Project 1**, 2 credit hours, CS Bachelor

CSC 102   **Computer Programming 2**, 6 lecture credit hours, CS Bachelor

CIS 611   **Big Data Analytics**, 3 lecture credit hours, Master of Data Science

CIS 605   **Programming for Data Science**, 3 lecture credit hours, Master of Data Science

CSC 624   **Research Project 1**, 3 credit hours, Master of Artificial Intelligence

Spring 2022 - Second Semester 1443

CSC 490   **Graduation Project 1**, 3 credit hours, CS Bachelor

  Graduation Project 1, 6 credit hours, CS Bachelor

CSC 101   **Computer Programming 1**, 3 lecture credit hours, CS Bachelor

CIS 601   **Data Science Fundamentals**, 3 lecture credit hours, Master of Artificial Intelligence

CSC 624   **Research Project 2**, 3 credit hours, Master of Artificial Intelligence

Fall 2022 - First Trimester 1444

CIT 0341   **IT Project Management** , 8 lecture credit hours, IT Bachelor

CSC 0490   **Graduation Project 1**, 1 credit hours, CS Bachelor

CIT 0490   **Graduation Project 1**, 1 credit hours, IT Bachelor

CSC 1101   **Introduction to Computing**, 5 lecture credit hours, CS Bachelor

CIS 0611   **Big Data Analytics**, 4 lecture credit hours, Master of Data Science

CIT 0616   **Introduction to Cyber Security and Digital Forensic**, 4 lecture credit hours, Master of Forensic Accounting

CSC 0624   **Research Project 1**, 3 credit hours, Master of Artificial Intelligence

Winter 2022 - Second Trimester 1444

CSC 0452   **Computer Graphics**, 5 lecture credit hours, CS Bachelor

CSC 0492   **Selected Topics in Computer Science** , 5 credit hours, CS Bachelor

CSC 0491   **Graduation Project 2**, 3 credit hours, CS Bachelor

CIT 0491   **Graduation Project 2**, 3 credit hours, IT Bachelor

CIT 0603   **Database Security**, 5 lecture and 1 lab credit hours, Master of Information Security

CSC 0624   **Research Project 2**, 3 credit hours, Master of Artificial Intelligence

Spring 2023 - Third Trimester 1444

CIT 0453   **Multimedia Systems**, 15 lecture credit hours, IT Bachelor

CSC 0624   **Research Project 3**, 3 credit hours, Master of Artificial Intelligence

Fall 2023 - First Semester 1445

CSC 420	🔖	**Theory of Computation**, 9 lecture credit hours, CS Bachelor
CIT 453	🔖	**Multimedia Systems**, 3 lecture credit hours, IT Bachelor
CSC 1102	🔖	**Problem Solving and Programming Concepts** , 2 lecture credit hours, CS Bachelor
CIS 611	🔖	**Big Data Analytics**, 3 lecture credit hours, Master of Data Science

Spring 2024 - Second Semester 1445

CSC 420	🔖	**Theory of Computation**, 3 lecture credit hours, CS Bachelor
CSC 1203	🔖	**Advanced Programming Methods**, 9 lecture credit hours, CS Bachelor
CSC 1101	🔖	**Introduction to Computing**, 2 lecture credit hours, CS Bachelor
CSC 490	🔖	**Graduation Project 1**, 1 credit hours, CS Bachelor
CIT 616	🔖	**Introduction to Cybersecurity and Digital Forensics** , 3 lecture credit hours, Master of Forensic Accounting

### Fall 2024 - First Semester 1446

CSC 420	🔖	**Theory of Computation**, 6 lecture credit hours, CS Bachelor
CSC 1201	🔖	**Object Oriented Programming**, 6 lecture credit hours, CS Bachelor
CSC 490	🔖	**Graduation Project 1**, 1 credit hours, CS Bachelor
CSC 491	🔖	**Graduation Project 2**, 3 credit hours, CS Bachelor
606 CSC	🔖	**Computer Vision**, 3 lecture credit hours, Master of Artificial Intelligence

Research Publications

Journal Articles

1 Alhakamy, A. (2024a). Extended reality (xr) toward building immersive solutions: The key to unlocking industry 4.0. *ACM Comput. Surv.*, *56*(9). 🔗 doi:10.1145/3652595

2 Alhakamy, A. (2023a). Digital vaccination passport and administrative burden of covid-19 official application based on twitter(x) discourse: Public interest vs democracy. *Multimedia Tools and Applications*, *23*(7). 🔗 doi:10.1007/s11042-023-17598-7

3 Alatawi, H., Albalawi, N., Shahata, G., Aljohani, K., Alhakamy, A., & Tuceryan, M. (2023). Augmented reality-assisted deep reinforcement learning-based model towards industrial training and maintenance for nanodrop spectrophotometer. *Sensors*, *23*(13). 🔗 doi:10.3390/s23136024

4 Alhakamy, A. (2023b). Fathoming the mandela effect: Deploying reinforcement learning to untangle the multiverse. *Symmetry*, *15*(3). 🔗 doi:10.3390/sym15030699

5 Alhakamy, A., Alhowaity, A., Alatawi, A. A., & Alsaadi, H. (2023). Are used cars more sustainable? price prediction based on linear regression. *Sustainability*, *15*(2). 🔗 doi:10.3390/su15020911

6 Albalawi, S., Alshahrani, L., Albalawi, N., Kilabi, R., & Alhakamy, A. (2022). A comprehensive overview on biometric authentication systems using artificial intelligence techniques. *International Journal of Advanced Computer Science and Applications*, *13*(4). 🔗 doi:10.14569/IJACSA.2022.0130491

7 Alharbi, R., Alageel, N., Alsayil, M., Alharbi, R., & Alhakamy, A. (2022). Prediction of oil production through linear regression model and big data tools. *International Journal of Advanced Computer Science and Applications*, *13*(12). 🔗 doi:10.14569/IJACSA.2022.0131246

8 Alomani, S. M., Alhawiti, N. I., & Alhakamy, A. (2022). Prediction of quality of water according to a random forest classifier. *International Journal of Advanced Computer Science and Applications*, *13*(6). 🔗 doi:10.14569/IJACSA.2022.01306105

9 Alhakamy, A., & Tuceryan, M. (2020a). Real-time illumination and visual coherence for photorealistic augmented/mixed reality. *ACM Comput. Surv., 53*(3). 🔗 doi:10.1145/3386496

10 Trajkova, M., Alhakamy, A., Cafaro, F., Vedak, S., Mallappa, R., & Kankara, S. R. (2020). Exploring casual covid-19 data visualizations on twitter: Topics and challenges. *Informatics, 7*(3). 🔗 doi:10.3390/informatics7030035

Conference Proceedings

1 Alhakamy, A. (2024b). "xr is a game": Exploring people's reasons for using, limiting, and abandoning extended reality. In *2024 ieee international conference on real-time computing and robotics (rcar)* (pp. 271–278). 🔗 doi:10.1109/RCAR61438.2024.10670927

2 Alessa, N., Majdua, A., Alshehri, S., Alhawiti, M., Aljohani, R., & Alhakamy, A. (2023). Banking in terms of deposit prediction based on machine learning and big data analytics. In *2023 11th international conference on control, mechatronics and automation (iccma)* (pp. 69–74). 🔗 doi:10.1109/ICCMA59762.2023.10374595

3 Alshammari, A., Alshammari, R., Altalak, M., Alshammari, K., & Alhakamy, A. (2022). Credit-card fraud detection system using big data analytics. In *2022 international conference on electrical, computer, communications and mechatronics engineering (iceccme)* (pp. 1–7). 🔗 doi:10.1109/ICECCME55909.2022.9987791

4 Alhakamy, A., Trajkova, M., & Cafaro, F. (2021). Show me how you interact, i will tell you what you think: Exploring the effect of the interaction style on users' sensemaking about correlation and causation in data. In *Designing interactive systems conference 2021* (pp. 564–575). 🔗 doi:10.1145/3461778.3462083

5 Alhakamy, A., Cafaro, F., Trajkova, M., Kankara, S., Mallappa, R., & Veda, S. (2020). Design strategies and optimizations for human-data interaction systems in museums. In *2020 ieee 20th international conference on advanced learning technologies (icalt)* (pp. 246–248). 🔗 doi:10.1109/ICALT49669.2020.00081

6 Trajkova, M., Alhakamy, A., Cafaro, F., Mallappa, R., & Kankara, S. R. (2020). Move your body: Engaging museum visitors with human-data interaction. In *Proceedings of the 2020 chi conference on human factors in computing systems* (pp. 1–13). 🔗 doi:10.1145/3313831.3376186

7 Alhakamy, A., & Tuceryan, M. (2019a). An empirical evaluation of the performance of real-time illumination approaches: Realistic scenes in augmented reality. In L. T. De Paolis & P. Bourdot (Eds.), *Augmented reality, virtual reality, and computer graphics* (pp. 179–195). 🔗 doi:10.1007/978-3-030-25999-0_16

8 Alhakamy, A., & Tuceryan, M. (2019b). Polarization-based illumination detection for coherent augmented reality scene rendering in dynamic environments. In M. Gavrilova, J. Chang, N. M. Thalmann, E. Hitzer, & H. Ishikawa (Eds.), *Advances in computer graphics* (pp. 3–14). 🔗 doi:10.1007/978-3-030-22514-8_1

9 Alhakamy, A., & Tuceryan, M. (2019c). Ar360: Dynamic illumination for augmented reality with real-time interaction. In *2019 ieee 2nd international conference on information and computer technologies (icict)* (pp. 170–174). 🔗 doi:10.1109/INFOCT.2019.8710982

10 Alhakamy, A., & Tuceryan, M. (2019d). Cubemap360: Interactive global illumination for augmented reality in dynamic environment. In *2019 southeastcon* (pp. 1–8). 🔗 doi:10.1109/SoutheastCon42311.2019.9020588

11 Alsaiari, A., Rustagi, R., Alhakamy, A., Thomas, M. M., & Forbes, A. G. (2019). Image denoising using a generative adversarial network. In *2019 ieee 2nd international conference on information and computer technologies (icict)* (pp. 126–132). 🔗 doi:10.1109/INFOCT.2019.8710893

12 Cafaro, F., Trajkova, M., & Alhakamy, A. (2019). Designing embodied interactions for informal learning: Two open research challenges. In *Proceedings of the 8th acm international symposium on pervasive displays.* 🔗 doi:10.1145/3321335.3329688

Books and Chapters

1 Alhakamy, A., & Tuceryan, M. (2020b). *Physical environment reconstruction beyond light polarization for coherent augmented reality scene on mobile devices* (M. L. Gavrilova, C. J. K. Tan, J. Chang, & N. M. Thalmann, Eds.). 🔗 doi:10.1007/978-3-662-61983-4_2

Recommendations

Available on LinkedIn and upon Request