

DR. MOHAMMED SIDDIQUE

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Professional Summary:

I, Mohammed Siddique, a **Senior Fellow of Higher Education Academy, UK** is working in Majan University College as an Assistant Professor and Head of Registry Systems and Examinations. I have 22+ years of academic and industrial experience in **India, South Korea and Oman** in teaching different IT subjects in reputed colleges to diploma and undergraduate students from various universities. I have coordinated and developed many real-time large-scale applications in IT companies using both Microsoft and Java platforms with latest technologies on several domains. I have a Doctorate of Philosophy (PhD), Masters in Computer Applications and a BSc in Computer Science degree. Additionally, I have postgraduate diploma certifications in Visual Studio with MSSQL Server/Oracle and Web Application development to my credit.

Teaching Expertise:

Consistently Excellent Academic Record with Teaching Experience in subjects

- Grid Services and Distributed Systems, Distributed & Parallel Architecture
- Data Governance, Risk and Compliance
- Client-Server Application Development [Visual Studio .Net]
- Web Programming, Design & Development, Internet Concepts [Java/J2ee]
- Software Engineering
- Database Management System, Administration
- Management Information Systems Strategy & Security Risks
- Service Oriented Architecture
- Professional Project Management
- Internetworking, Computer Network Programming, Network Security, Cryptography & Cryptanalysis

Software development Expertise

JAVA/J2EE, VISUAL STUDIO.NET [ASP.NET-C#/VB], DB2-AS400,
ORACLE12C, 10G/SQL SERVER 2019/MYSQL

My research interest is in the IT domain that include:

- Artificial Intelligence and Data Science
- Image Processing, Machine and Deep Learning Algorithms
- Computer Networking and Internet of Things
- Parallel and Distributed Systems (Web Services Application)

Academic Experience:

- ✓ 2021-Present, Head of Registry Systems and Examinations and Assistant Professor, Majan University College, Sultanate of Oman
- ✓ 2015-2021, Director of Studies, Majan University College, Sultanate of Oman
- ✓ 2012-2015, Programme Manager, Majan University College, Sultanate of Oman
- ✓ 2011-2012, Senior Lecturer (IT), Majan University College, Sultanate of Oman
- ✓ 2010-2011, Worked as Senior Executive, Saud Bahwan Automotive LLC, Sultanate of Oman.
- ✓ 2005-2010, Worked as Senior Lecturer, Yeungjin University, Daegu, Republic of South Korea.
- ✓ 2004-2005, Worked as Senior Lecturer, Jameul-uloom Institute of Information Technology, Bengaluru, India.

Education:

- ✓ Doctorate of Philosophy (PhD) in Computer Applications
Integral University, Lucknow, India
- ✓ Master of Computer Applications (Computer Applications)
- ✓ Bachelors, Computer Science (Computer Science)

Recognitions:

- ✓ **Senior Fellow of the UK Higher Education Academy**, <https://www.advance-he.ac.uk/>
- ✓ **Outstanding Researcher in Artificial Intelligence**, Awarded for the contribution and achievement in the discipline of science, *Annual Research Meet 2024*, by Centre for Research and Innovation, Venus International Foundation, India.
- ✓ **Senior Member**, IEEE Oman section, 2025.

RESEARCH GRANT & PATENTS

- ✓ Title: **AI-driven Evaluation of New and Existing Vegetation Regions in the Sultanate of Oman: A Satellite Images based Sustainable Vegetation Management System.**
Principal Investigator (PI): **Siddique, M.** and Co-Principal Investigator (PI): **Dr. Albert T.** and International team with researchers from Oman and India.
Funded by: Ministry of Education (MOE), Oman.
Grant Amount: **OMR 11,000 (US \$29000).**
Duration: **2025–2027 (Ongoing).**
- ✓ **Siddique, M. et al.** (2026) Assistive Smart Learning Station for Inclusive Higher Education. UK Registered Design no. 6499905. *UK Intellectual Property Office*. Available at: <https://www.registered-design.service.gov.uk/find/6499905> (Accessed: 31 January 2026).

Journal publications:

- ✓ **Siddique, M.** and Ahmed, T., 2025. CCD-Conv1D: A deep learning based coherent change detection technique to monitor and forecast floods using sentinel-1 images, *Remote Sensing Applications: Society and Environment*, 37, p.101440. <https://doi:10.1016/j.rsase.2024.101440>. Available: <https://www.sciencedirect.com/science/article/abs/pii/S2352938524003045?via%3Dihub>.
- ✓ **Siddique, M.**, Ahmed, T. and Husain, M.S., 2024. A Deep Learning-based Approach to Predict the Flood Patterns Using Sentinel-1A Time Series Images. *Journal of the Indian Society of Remote Sensing*, pp.1-15. <https://doi.org/10.1007/s12524-024-02016-8> Available: <https://link.springer.com/article/10.1007/s12524-024-02016-8>.
- ✓ **Siddique, M.**, Ahmed, T. and Shahid Husain, M., "Flood monitoring and early warning systems – an IOT based perspective", *EAI Endorsed Transactions on Internet of Things*, eISSN: 2414-1399, pp. 1–10, Vol. 9, No. 2, 24th July 2023, DOI:10.4108/eetiot.v9i2.2968, Available: <https://publications.eai.eu/index.php/IoT/article/view/2968/2437>.
- ✓ **M. Siddique**, T. Ahmed and M. S. Husain, "An Empirical Approach to Monitor the Flood-Prone Regions of North India Using Sentinel-1 Images", *Annals of Emerging Technologies in Computing (AETiC)*, Print ISSN: 2516-0281, Online ISSN: 2516-029X, pp. 1-14, Vol. 6, No. 4, 1st October 2022, Published by International Association of Educators and Researchers (IAER), DOI: 10.33166/AETiC.2022.03.001, Available: <http://aetic.theiaer.org/archive/v6/v6n4/p1.html>.
- ✓ Alansari, Z., **M. Siddique**, and Ashour, M.W., "FCERP: A Novel Wireless Sensor Networks Fuzzy Based Clustering and Energy-Efficient Routing Protocol", *Annals of Emerging Technologies in Computing (AETiC)*, Print ISSN: 2516-0281, Online ISSN: 2516-029X, pp. 31-42, Vol. 6, No. 1, 1st January 2022, Published by International Association of Educators and Researchers (IAER), DOI: 10.33166/AETiC.2022.01.002, Available: <http://aetic.theiaer.org/archive/v6/v6n1/p2.html>.

Conference publications:

- ✓ Ashour, M.W., Siddiqui, M.Q., **Siddique, M.** (2025). Bitcoin Price Prediction (BTCPP) Framework Using Deep Learning Approach. In: Miraz, M.H., Southall, G., Ali, M., Ware, A. (eds) *Emerging Technologies in Computing. iCETiC 2024. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, vol 623. Springer, Cham. https://doi.org/10.1007/978-3-031-92625-9_6
- ✓ Menezes, J., Hemachandra, N., Isidro, K. and **Siddique, M.**, 2025. Technology aided framework for dealing with students' mental health. In *Advances in Science, Engineering and Technology* (pp. 133-141). CRC Press, Available: <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003641544-25>
- ✓ **M. Siddique** and M. W. Ashour, "Parallel Computing with GPU: An accelerator for Data-Centric High Performance Computing," 2024 1st International Conference on Innovative Engineering Sciences and Technological Research (ICIESTR), Muscat, Oman, 2024, pp. 1-6, doi:

10.1109/ICIESTR60916.2024.10798202,

Available:

<https://ieeexplore.ieee.org/document/10798202>.

- ✓ Ashour, M.W., Abdulrazzaq, M.M., **Siddique, M.** (2023). Machine Vision Inspection of Steel Surface Using Combined Global and Local Features. In: *Latifi, S. (eds) ITNG 2023 20th International Conference on Information Technology-New Generations*. ITNG 2023. Advances in Intelligent Systems and Computing, Vol. 1445. Springer, Cham, DOI: 10.1007/978-3-031-28332-1_41, Available: https://link.springer.com/chapter/10.1007/978-3-031-28332-1_41.
- ✓ **M. Siddique**, T. Ahmed and M. S. Husain, "An Integrated Image Classification Approach to Detect the Flood Prone Areas using Sentinel-1 Images," *2023 10th International Conference on Computing for Sustainable Global Development (INDIACom)*, New Delhi, India, 2023, pp. 655-660, Available: <https://ieeexplore.ieee.org/abstract/document/10112258>.
- ✓ **M. Siddique**, T. Ahmed and M. S. Husain, "Random Forest Based Flood Monitoring Using Sentinel-1 Images: A Case Study of Flood Prone Regions of North-East India", *2022 IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2022)*, 2022, pp. 4883-4886, DOI: 10.1109/IGARSS46834.2022.9884483, Available: <https://ieeexplore.ieee.org/document/9884483>.
- ✓ E. John and **M. Siddique**, "Efficient Semantic Web Services Development Approaches using REST and JSON," *2021 International Conference on Decision Aid Sciences and Application (DASA)*, 2021, pp. 231-235, DOI: 10.1109/DASA53625.2021.9682324, Available: <https://ieeexplore.ieee.org/document/9682324>.
- ✓ M. N. Waheed and **M. Siddique**, "Real-Time Scheduling Models in Diverse Multi-core OpenMP Applications," *2021 International Conference on Decision Aid Sciences and Application (DASA)*, 2021, pp. 702-705, DOI: 10.1109/DASA53625.2021.9682396, Available: <https://ieeexplore.ieee.org/document/9682396>.
- ✓ S. T. Ataullah and **M. Siddique**, "Optimisation Techniques for Multicore Architectures and Parallel Processing using OpenMP," *2021 International Conference on Decision Aid Sciences and Application (DASA)*, 2021, pp. 187-191, DOI: 10.1109/DASA53625.2021.9682392, Available: <https://ieeexplore.ieee.org/document/9682392>.
- ✓ S. J. J. Mary, S. S. A. Joe and **M. Siddique**, "IRDM watermarking with EMRC6 encryption for DRM system", 2018, Proceedings of MIC 2018: Promoting Entrepreneurship & Technological Skills: National Needs, Global Trends, Majan International Conference (MIC2018), pp. 1-5. DOI: 10.1109/MINTC.2018.8363157, Available: <https://ieeexplore.ieee.org/abstract/document/8363157>.

Book/Book Chapters:

- ✓ M., Siddique, M., (2026). A Reflective Journey to Professional Development: Advance HE Fellowship Experience. In *Mitchell, P., Al-Busaidi, S. Reflective Practice for Elevating Higher Education: Voices from Oman* (pp. 131-144). Berlin, Germany: Peter Lang Verlag. DOI:10.1201/9781003409571-11, Available: <https://www.peterlang.com/document/1594569>
- ✓ Afaq, S.A., Faisal, M., **Siddique, M.** and Uzma, S., (2026). Soft computing: An introduction to intelligent problem-solving techniques. In *Smart Heat Transfer and Thermal Management* (pp. 161-189). Woodhead Publishing. <https://www.sciencedirect.com/science/chapter/edited-volume/abs/pii/B9780443338816000162?via%3Dihub>
- ✓ Dwivedi, S., Afaq, S. A., Faisal, **M., Siddique, M.**, & Verma, N. K. (2025). Transforming Healthcare: Exploring the Intersection of IoT and Machine Learning. In D. Mishra, R. Kumar, & A. Abdul Hamid (Eds.), *Startup-Driven E-Government: Digital Innovation for Sustainable Ecosystems* (pp. 561-602). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-0817-3.ch022>, Available: <https://www.igi-global.com/gateway/chapter/381266>.
- ✓ **Siddique, M.** and Ahmed, T. (2025) *Digital Flood Analytics Vol 1*. 1st edn, Amazon.com. 1st edn. S.I.: LANGAA RPCIG. Available at: [Digital Flood Analytics: Satellite Images-Based Flood Detection and Prediction: Analysis, Insights, and Trends](#) (Accessed: 25 June 2025).
- ✓ Afaq, S.A., Dwivedi, S., Faisal, M., Jana, S., Habiba, U., **Siddique, M.** (2025). Enhancing Fuzzy Multi Criteria Decision Making Technique in Engineering Design Problem. In: Jana, S., Basu Mallik, B., Sarkar, A., Jana, C. (eds) *Applications of Fuzzy Logic in Decision Making and Management Science*. Information Systems Engineering and Management, vol 29. Springer, Cham., Available: https://link.springer.com/chapter/10.1007/978-3-031-77719-6_24.
- ✓ Verma, H.C. and **Siddique, M.**, Understanding and Mitigating Cyber Threats in Smart Fruit Crops Safety: An Analysis of Vulnerability and Best Practices for Securing Agricultural Systems. In *Cyberology* (pp. 190-199). Chapman and Hall/CRC, Available: <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003409571-11/understanding-mitigating-cyber-threats-smart-fruit-crops-safety-harish-chandra-verma-mohammad-siddique>
- ✓ **M.Siddique**, T. Ahmed, 2021, "Role of Satellite Images in Estimation of Locust Swarm Infested Areas during Covid-19 Pandemic in India", *Information and Communication Technology*, Aargon Press, New Delhi, pp. 105-122, ISBN: 978-93-94070-92-9.

Conference Presentations:

- ✓ Tayebipour, F, **Siddique, M.**, Hamid. A, " Understanding the Impact of Turnitin and AI Tools on Academic Integrity within Omani Higher Education ", 2026, CES26, First International Conference on English Studies, Dhofar University, Salalah, Oman.
- ✓ **M.Siddique**, T. Ahmed, "Evaluating Web Services Frameworks for the Development of Enterprise Web Service Computing Systems", 2020, pp. 41, *RAICT0034*, e-Souvenir of International e-Symposium on Recent Advancements in Information and Communication Technology (RAICT 2020), Integral University, Lucknow.
- ✓ **M.Siddique**, T. Ahmed, "Role of Satellite Images in Estimation of Locust Swarm Infested Areas during Covid-19 Pandemic in India", 2020, pp. 26, *RAICT0033*, e-Souvenir of International e-Symposium on Recent Advancements in Information and Communication Technology (RAICT 2020), Integral University, Lucknow.

References

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