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Dr. Mohammed Abdulrahman is an Associate Professor at the University of Prince Mugrin (UPM), Madinah, KSA. At UPM, Dr. Rahman has received the Best Researcher Award for the past 3 consecutive years. He received more than 15M SAR as research grants. Dr. Abdulrahman is among the top 2% scientists in the world. His research interests include Self-Explainable and Trustworthy AI for OT Applications, Adversarial Attacks and Defense Mechanisms of AI models serving OT Applications, Industrial IoT and 6G for IT/OT Converged Applications, Metaverse for ICS, and Large Language Models (LLM) for OT System Automation and OT SOC.

Qualification :

- Ph.D. in Electrical and Computer Engineering, University of Ottawa, ON, Canada, 2010
- M.A.Sc. in Electrical and Computer Engineering, University of Ottawa, ON, Canada, 2005

Research Interest :

- Research interests include Self-Explainable and Trustworthy AI for OT Applications, Adversarial Attacks and Defense Mechanisms of AI models serving OT Applications, Industrial IoT and 6G for IT/OT Converged Applications, Metaverse for ICS, and Large Language Models (LLM) for OT System Automation and OT SOC, GRC for AI-Based Applications, AI and Security for Medical Applications, AI and Security for Smart City Applications.

Publications :

- 2024 (1) J56. M. S. Hossain, M. S. Islam and M. A. Rahman, ""A Cyber Range Framework for Emulating Secure and Private IT/OT Consumer Service Verticals Towards 6G,"" in IEEE Transactions on Consumer Electronics, https://doi.org/10.1109/TCE.2024.3387055. [IF: 4.3 Q1]
- 2023 (1) J55. M. A. Rahman, M. Shamim Hossain, Ahmad J. Showail, Nabil A. Alrajeh, and A. M. Ghoneim, "AI-Enabled IIoT for Live Smart City Event Monitoring", IEEE Internet of Things Journal, vol. 10, no. 4, pp. 2872-2880, FEBRUARY 15, 2023 https://doi.org/10.1109/JIOT.2021.3109435 [IF: 10.238 Q1]

• 2022 (3) J54. M. A. Rahman, M. Shamim Hossain, "Design of a Secure Internet of Artificially Intelligent Things in the 6G Era", EEE Internet of Things Magazine, vol. 5, no. 2, pp. 49-54, 2022. https://doi.org/10.1109/IOTM.001.2100120 [IF: 3.5 Q1]

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• 2021 (9) J51. Ayman Alharbi, M. A. Rahman, "Review of Recent Technologies for Tackling COVID-19", Springer Nature CS Journal, vol. xx, no. xx, pp. xx-xx, October 2021 https://doi.org/10.1007/s42979-021-00841-z.

J50. A. K. Sangaiah, J. S. Ramamoorthi, J.P.C. Rodrigues, M. A. Rahman, G. Muhammad, and Mubarak Alrashoud, "LACCVoV: Linear Adaptive Congestion Control with Optimization of Data Dissemination Model in Vehicle-to-Vehicle Communication", IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, vol. 22, no. 8, pp. 5319-5328, August 2021 https://doi.org/10.1109/TITS.2020.3041518 [IF: 9.551, Q1]

J49. M. A. Rahman, M. Shamim Hossain, Ahmad J. Showail, and Nabil A. Alrajeh, "Human-AI Teaming for the Next Generation Smart City Healthcare Systems - IEEE Smart Cities", IEEE Newsletter (https://smartcities.ieee.org/newsletter), https://smartcities.ieee.org/newsletter/june-2021/human-ai-teaming-for-the-next-generation-smart-city-healthcare-systems, June 2021.

J48. M. A. Rahman, M. Shamim Hossain, Ahmad J. Showail, Nabil A. Alrajeh, and Mohammed F. Alhamid, "A Secure, Private, and Explainable IoHT Framework to Support Sustainable Health Monitoring in a Smart City", Elsevier Sustainable Cities and Society, vol. 72, no. 103083, pp. xx-xx, September 2021 https://doi.org/10.1016/j.scs.2021.103083 [IF: 7.587 Q1]

J47. M. A. Rahman, M. Shamim Hossain, "An Internet of Medical Things-Enabled Edge Computing Framework for Tackling COVID-19", EEE Internet of Things Journal, vol. 8, no. 21, pp. 15847 - 15854, 2021 https://doi.org/10.1109/JIOT.2021.3051080 [IF: 10.6 Q1]

J46. M. A. Rahman, M. Shamim Hossain, Nabil A. Alrajeh, and B. Gupta, ""A Multi-Modal Multimedia Point-of-Care Deep Learning Framework for COVID-19 Diagnosis", ACM Transactions on Multimedia Computing, Communications, and Applications, vol. 17, no. 1s, Article No.: 18, pp. 0-24, March 2021 https://doi.org/10.1145/3421725 [IF: 3.983 Q1]

J45. M. A. Rahman, M. Shamim Hossain, Nabil A. Alrajeh, and Fawaz Alsolami, "Adversarial Examples—Security Threats to COVID-19 Deep Learning Systems in Medical IoT Devices", EEE Internet of Things Journal, vol. 8, no. 12, pp. 9603-9610, June 15 2021, DOI: https://doi.org/10.1109/JIOT.2020.3013710 [IF: 10.238 Q1] (ISI Highly Cited)"

Other Accreditation:

- Senior Member IEEE

- Member ACM

- ISO 27001:2022 Lead Auditor

- Certified Information Security Manager (CISM), ISACA, 2023

- Certified Information Systems Auditor (CISA), ISACA, 2023

- Certified in Risk and Information Systems Control (CRISC), ISACA, 2024

- Chairman, Industrial Collaboration and Relations Committee, College of Computer and Cyber Sciences, University of Prince Mugrin

- Member, Higher Committee for Scientific Research and Graduate Studies Member, Scientific Council

- General Supervisor of the Scientific Research and Postgraduate Studies Department (المشرف العام على إدارة البحث العلمي والدراسات العليا)

- Member, Dr. Hussein Elsayyed Center for Scientific Research and Studies

- Director, Advanced Media Laboratory

- Director, Smart City Research Lab

- Associate Fellow, Institute of Industrial Revolution 4.0, National University Malaysia (UKM), Malaysia

- External Honorary Fellow, CODA Research Centre, King's College London, UK Founder, Science and Technology Unit (STU) "