

## Internet of Medical Things (IoMT): The Future of Healthcare



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The internet of medical devices, health systems, and software applications (IoMT) is a network of internet-connected medical equipment, health systems, and software applications meant to increase efficiency, lower healthcare costs, and ensure better medical results. Wearable gadgets and stand-alone equipment are examples of IoMT technologies that can help with remote patient monitoring, which is becoming more important as telehealth grows. IoMT is a unique and advanced infrastructure that is representative of the future of medicine when combined with patient data. Medical practitioners and the patients they serve are increasingly embracing and adopting IoMT technologies. The demand for internet-connected medical devices that can gather, analyse, and transmit medical data and images to healthcare provider networks is continuing to rise. The information might be transferred and stored on internal servers. In the area of healthcare, the prospects of IoMT are exciting. The healthcare business should expect fewer errors, more accurate diagnoses, and lower healthcare costs as internet technology in medical equipment evolve. This session will cover the introduction of IoMTs and then introduce an architecture of IoMTs. Further, several emerging technologies such as Blockchain, Artificial Intelligence (AI), and Software-Defined Networking (SDN) will be discussed and several challenges in e-healthcare such as security, privacy, performance and accuracy will be highlighted.

### Biography:

Prof. Tanzila Saba earned her PhD in document information security and management from the Faculty of Computing, Universiti Teknologi Malaysia (UTM), Malaysia, in 2012. She is serving as an Associate Chair of the Information Systems Department in the College of Computer and Information Sciences at Prince Sultan University, Riyadh, KSA. In recent years, her primary research focus has been medical imaging, pattern recognition, data mining, and information security. She has published three hundred-plus publications in high-ranked journals. Currently, she is the editor and reviewer of highly reputed journals and on the panel of TPC of internationally indexed conferences. She is a senior member of IEEE. Prof. Tanzila is the leader of the Artificial Intelligence & Data Analytics Research Lab at Prince Sultan University and an active professional member of ACM, AIS and IAENG organizations. She is the PSU WiDS (Women in Data Science) ambassador at Stanford University. She received the Best Researcher award for four consecutive years at Prince Sultan University. She has been among the world's top 2% of scientists for four consecutive years (2020 & 2023). She is the only female researcher in KSA listed in Guide2research since 2019-2023.