Keynote talk 2
Prof. Mohammed Odeh

Title: Cancer Care as "Systems of Systems". Paving the Way for the Cancer Care Informatics Initiative and Discipline

Abstract: Systems of Systems (SoS) may be defined as a form of arrangement of autonomous and heterogeneous systems that when integrated together result in a useful system to humanity that delivers unique functional and non-functional capabilities. Cancer Care may be defined as caring for the patient as a whole including his or her needs, not just the medical and physical ones. Such comprehensive cancer care involves the services of many Cancer Care professionals, care centres, research and trial institutions, government agencies, civil society organisations, and many others working together. In this seminar, cancer care will be presented within the notion of systems of systems from number of perspectives such as characterisation, known classifications, capabilities, challenges, etc. Furthermore, the SoS Perspective of Cancer Care and how it forms the foundation for the new discipline of Cancer Care Informatics will be discussed with reference to strategic modelling, governance, change management, derivation of cancer care services from cancer care process models, big data analytics for cancer care, the 1st MSc in Cancer Care Informatics, and the 1st International Conference on Cancer Care Informatics.

Biography:

Mohammed Odeh, PhD: Head of the Software Engineering Research Group in the University of the West of England, and is Professor of Cancer Care Informatics (first professor awarded this title) at King Hussein Cancer Center in Jordan. Mohammed has co-founded Cancer Care Informatics as a dedicated initiative and discipline that includes the 1st International Conference on Cancer Care Informatics, the 1st MSc in Cancer Care Informatics taught and research programme jointly run with King Hussein Cancer Center and the University of Jordan, with input from the University of West of England, Bristol, UK. He is also the co-founder and co-editor in chief of the forthcoming International Journal on Cancer Care Informatics. He has more than 33 years of research and development experience in the engineering of software systems with an in-depth interest in Systems of Systems software engineering, Knowledge-driven Requirements Engineering and Bridging the Gap between Business Processes and Computer-based Systems. He has been supervising 20 PhD students in software engineering and other related disciplines. Mohammed has been acting as invited PhD examiner externally and internally, referee for the promotion of academic staff to professorial posts, invited keynote speaker in international conferences, and associate editor on international journals. Mohammed was co-organiser of the 5th IEEE CloudCom Conference in December 2013 and introduced the first Requirements Engineering for Cloud Computing (RECC) in the IEEE CloudCom Conference. He has been the UWE principal investigator on the OntoREM project and as a joint inventor of OntoREM with Dr. Kossmann from Airbus, and with two US patent, one has been fully granted. Among other research output include 46 refereed journal papers and books (including books and research work to appear) and 50 conference papers. He was an associate editor of the INCOSE/Wiley Systems Engineering and sits on the editorial board of the IAJIT journal. Also, he is on the steering committee of the ACIT conference series. He has been UWE Bristol co-investigator on EU FP5, FP6 and FP7 projects. Mohammed was the programme leader and co-organiser of the 2015 EICM Conference in Bristol, UK.