Title: Computing in medicine: a role-play supports diagnosis and assessment of diseases in patients

Speaker:
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Abstract:
Computing is a principle of leading data visualisation, translation and findings of new information. In medicine, understanding and reading medical images are crucial to analyse and assess medical data before making a decision and treatment for patients. Computational modelling, simulation and technology enable to form the digital medicine and gain new knowledge to develop non-invasive techniques for diagnosis and assessment of diseases in patients. This talk covers the current state of the art non-invasive imaging approaches and predicts the trends of computing and machine learning in medicine and healthcare.

Autobiography:
Thanapong Chaichana gained his PhD degree in Medical Imaging/Biomedical Engineering from Curtin University, Perth, Western Australia; MEng and BEng degrees in Biomedical Electronics and Electronics Engineering, respectively, from King Mongkut’s Institute of Technology Ladkrabang, Bangkok, Thailand. He worked as a Lecturer in Signal and Medical Image Processing at Faculty of Biomedical Engineering, Rangsit University, Thailand. He was awarded a PhD Scholarship provided by the State Centre of Excellent in e-Medicine, Department of Commerce, Western Australia, Australia for International Postgraduate Research at Curtin University. He was also the recipient of the best paper award at SocPros’16, Soft Computing Research Society, New Delhi, India. He worked as a Research Associate in Department of Computing at the Hamlyn Centre for Robotic Surgery, Imperial College London before joining Liverpool Hope University in June 2016.

Thanapong is Assistant Professor in Computing at Liverpool Hope University, Liverpool, UK. He worked as a Postdoctoral Research Fellow in Medical Physics and Image Analysis at University of Leeds, after his PhD completion. His main research interests are in modern medicine for non-invasive imaging techniques using computational modelling and simulation to study human biomechanics and his speciality in computational fluid dynamics analysis of cardiovascular disease. He has published >35 research papers in prestigious journals and proceedings. He serves as special editor for Journal of Mechanics in Medicine and Biology and reviewers for grant funding and many journals in biomechanics, computation, simulation and imaging. He is a Fellow of the Society of Cardiovascular Computed Tomography and Fellow of the Royal Society of Medicine.