Title: AI-2030: toward Human-Machine Co-Intelligence

Abstract: Big Data has become an incredibly powerful driver for technological innovation particularly it has made the boom of Artificial Intelligence (AI) economy. Artificial Intelligence is changing the way we do research and business. Aimed making machine intelligence, Artificial Intelligence (AI) has made huge contribution to the innovation in automation and problem solving through machine learning. With the emerging of Big Data, the next generation AI will not only be needed to enable machine intelligence for automation, but also be needed to empower human intelligence to deal with big data. Human intelligence is not sufficient in decision-making when facing big data, and will rely on machine intelligence to help. New framework is needed for the next ten years of AI research and development, shifting from making machine intelligence to finding new ways to empower human intelligence i.e. how to power human intelligence and machine intelligence to work together, as a partnership. The current development of explainable AI and interactive AI will all contribute toward this goal but it will also need new mechanism to build the trust between human intelligence and machine intelligence. This talk will discuss this sifting of the next generation AI, and explore the opportunity and the challenges.

Biography: Prof Peng is a Professor of Artificial Intelligence and the Director of the Centre for Advanced Computational Science at the Manchester Metropolitan University UK. Prior to that, Prof Peng is a Professor of Data Science and the founding director for the Centre of Research and Innovation in Data Science at the University of Sunderland UK. He is research interest includes AI and Data Science and their application to health informatics, genome and precision medicine. He is the Chair for the Big Data Task Force (BDTF) of IEEE computational intelligence society (CIS), and a member of Data Mining and Big Data Analytics Technical Committee of IEEE CIS. He is also a founding member of the Technical Committee on Big Data (TCBD) of IEEE Communications, and a member of Big Data Task Force of China Information Industry Association (CIIA). He is an advisory board member for IEEE Special Interest Group (SIG) on Big Data for Cybersecurity. He is an Associate Editor for IEEE Transaction on Big Data, IEEE Access, and an Academic Editor of PeerJ and PeerJ Computer Science.