

Session 3.1: Redeeming Business Technology

3rd February 2018

Title: The Business of Artificial Intelligence

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Keith C.C. Chan graduated with a B.Math. (Hons.) degree in Computer Science and Statistics and an M.A.Sc. and Ph.D. degree in Systems Design Engineering from the University of Waterloo, Canada. Soon after graduation, he joined the IBM Canada Laboratory in Toronto, Canada, as a software analyst and was involved in the development of multimedia and software engineering tools. After spending four years in the industry, he returned to academia and joined the Ryerson University in Toronto, Canada as an Associate Professor for a year. He then returned to Hong Kong to join The Hong Kong Polytechnic University where he is currently a Professor in the Department of Computing. From 2002 to 2008 he was the Head of the Department, and from 2011 to 2016

he was the Dean of Students.

Chan's research interests are in Artificial Intelligence, Machine Learning, Big Data Analytics, Bioinformatics, Fuzzy Systems, Nature-Inspired Computing and Software Engineering. He has 250 research publications in these areas in refereed journals and conference proceedings and has also been serving actively as organizer and program committee member of numerous conferences. Chan's research has been supported by the Research Grants Council, the Innovation and Technology Commission of the HKSAR Government and the industry. He has been active in "knowledge transfer" through consulting and contract research.

Abstract

Artificial Intelligence (AI) is concerned with the development of computer systems that can perform tasks that otherwise require human intelligence. These tasks can include visual perception, speech recognition, natural language understanding, learning, planning, reasoning, problem solving, knowledge management and decision making, etc. AI can have many applications in business and finance including, for example, content generation and curation, voice and image search, propensity modeling, ad targeting, dynamic pricing, web personalization, chatbots, opinion analysis, stock analysis, etc. Since AlphaGo's winning of matches against the world's top Go players, some believe that advances in AI are already ahead of human intelligence and some tech celebrities have started to talk about AI taking over, not just the jobs, but also the world. Among Christians, there have been talks about what the rise of AI means for Christian theology and if AI poses any challenge to Christianity, etc. In this workshop, I will present an overview of AI and my research related to it. I will explain how my work in Big Data Analytics, Machine Learning, Artificial Neural Network, Evolutionary Computation, Bioinformatics is motivated by my Christian faith and how and why future development in AI should be of concern to Christians.

Reading

- E. Brynjolfsson and A. McAfee, "The Business of Artificial Intelligence: What it can or cannot do for your organization," Harvard Business Review, July 2017. [Available here.](#)
- J. Merritt, "Is AI a Threat to Christianity?" The Atlantic, Feb 3, 2017. [Available here.](#)