



Information Systems and Management Group (ISM)

Summer Seminar Series – 2018-19

Speaker: Professor Alok Gupta

Title: Collaboration and Delegation Between Humans and AI:
Experimental Investigation of the Future of Work.

Date: 28th May 2019

Venue: Executive Board Room – Room 4.003

Time: 14.00 – 15:30

Abstract: A defining question of our age is how AI will influence the workplace of the future and, thereby, the human condition. The dominant perspective is that the competition between AI and humans will be won by either humans or machines. We argue that the future workplace may not belong exclusively to humans or machines. Instead, it is better to use AI together with humans by combining their unique characteristics and abilities. In three experimental studies, we let humans and a state of the art AI classify images alone and together. As expected, the AI outperforms humans. Humans could improve by delegating to the AI, but this combined effort still does not outperform AI itself. The most effective scenario was inversion, where the AI delegated to the AI when it was uncertain. Humans could in theory outperform all other configurations if they delegated effectively to the AI, but they did not. Human delegation suffered from wrong self-assessment and lack of strategy. We show that humans are even bad at delegating if they put effort in delegating well; the reason being that despite their best intentions, their perception of task difficulty is often not aligned with the real task difficulty if the image is hard. Humans did not know what they did not know. Because of this, they do not delegate the right images to the AI. This result is novel and important for human-AI collaboration at the workplace. We believe it has broad implications for the future of work, the design of decision support systems, and management education in the age of AI.

Bio:

Alok Gupta is the Associate Dean of Faculty and Research and Curtis L. Carlson Schoolwide Chair in Information Management at the Carlson School of Management, University of Minnesota. He was the chair of the IDSc Department at the Carlson School from 2006 to 2014; before coming to Carlson School, he was an Assistant Professor at Dept. of OPIM, University of Connecticut from 1996 to 2001. He received his Ph.D. in Management Science and Information from the University of Texas, Austin. In 2014 he was named an INFORMS Information Systems Society (ISS) Distinguished Fellow and in 2016 he was named as Fellow of the Association for Information Systems (AIS). He has been serving as the Editor-in-Chief of ISR since January 2017. His research has been published in various information systems, economics, and computer science journals such as Management Science, ISR, MIS Quarterly, CACM, JMIS, Journal of Economic Dynamics and Control, Decision Sciences, Journal of Operations Management, Computational Economics, Decision Support Systems, and many other high quality Journals. He was awarded a prestigious NSF CAREER Award for his research on dynamic pricing mechanisms on the internet. His research has won numerous awards including IS Publication of the Year award from AIS and ISS Design Science award twice in 2011 and 2012. From 1999-2001, he served as co-director of Treibick Electronic Commerce Initiative (TECI), an endowed research initiative at Dept. of OPIM, University of Connecticut. He is also an affiliate of the Center for Research in Electronic Commerce (CREC) at the University of Texas at Austin. He served as Senior Editor for ISR and an Associate Editor for Management Science. He has been serving as Publisher of MIS Quarterly since 2005. He teaches courses in the areas of computer networking, electronic commerce, decision support, IT infrastructure, and computer programming at the undergraduate, MBA and Ph.D. levels.

Registration: Elaine Smith, ISM Group

ism@wbs.ac.uk

024 7652 3741

For forthcoming seminars please go to:

<http://www2.warwick.ac.uk/fac/soc/wbs/subjects/ism/seminars/>