電子情報学セミナー

日時:2018年12月13日(木)13:30-14:30

会場: 東京大学 本郷キャンパス 工学部 2 号館 242 講義室 https://www.u-tokyo.ac.jp/campusmap/cam01_04_03_j.html

題目: Multimodal Knowledge Graph and Chatbot

講演者: Prof Tat-Seng CHUA

概要:

Knowledge Graph (KG) organizes human knowledge about the world in a structured form in which real-world entities are inter-connected by multiple relations. Knowledge Graph has recently become mainstream as large technology companies like Google, Facebook and Microsoft have announced their move from traditional search and data management to leveraging KG for semantic search and conversation system (Chatbot). While many research efforts on text-based KG have been carried out, little research has been done extending KG to multimodal information sources, along with multimodal search and Chatbot applications. In this talk, we first discuss fundamental research on knowledge extraction from text and video, and describe our recent research to move from object recognition in video to relation triplet extraction. We then discuss key challenges in multimodal KG construction and maintenance. Finally, we describe our research on building a multimodal Chatbot for fashion domain.

略歷:

Dr Chua is the KITHCT Chair Professor at the School of Computing, National University of Singapore. He was the Acting and Founding Dean of the School from 1998-2000. Dr Chua's main research interests include multimedia information retrieval, social media analytics, and the emerging applications in Chabot, wellness and Fintech. He is the co-Director of NExT, a joint Center between NUS and Tsinghua University on Extreme Search. He currently is visiting the University of Tokyo in his sabbatical as a JSPS Fellow.



Dr Chua is the recipient of the 2015 ACM SIGMM Achievements Award for the Outstanding Technical Contributions to Multimedia Computing, Communications and Applications. He is the Chair of steering committee of ACM International Conference on Multimedia Retrieval (ICMR) and Multimedia Modeling (MMM) conference series. Dr Chua is also the General Co-Chair of ACM Multimedia 2005, ACM CIVR (now ACM ICMR) 2005, ACM SIGIR 2008, and ACM Web Science 2015. He serves in the editorial boards of four international journals. Dr. Chua is the co-Founder of two technology startup companies in Singapore. He holds a PhD from the University of Leeds, UK.