

Title: AI at Dawn: Opportunities and Challenges

Abstract: Since the concept of Turing machine has been first proposed in 1936, the capability of machines to perform intelligent tasks went on growing exponentially. Artificial Intelligence (AI), as an essential accelerator, pursues the target of making machines as intelligent as human beings. It has already reformed how we live, work, learning, discover and communicate. In this talk, I will review our recent progress on AI by introducing some representative advancements from algorithms to applications, and illustrate the stairs for its realization from perceiving to learning, reasoning and behaving. To push AI from the narrow to the general, many challenges lie ahead. I will bring some examples out into the open, and shed lights on our future target. Today, we teach machines how to be intelligent as ourselves. Tomorrow, they will be our partners to get into our daily life.

Short Bio:

Prof Dacheng Tao is an Australian Laureate Fellow and the Inaugural Director of the UBTECH Sydney Artificial Intelligence Centre at the University of Sydney. His research results in AI have expounded in one monograph and 500+ publications at leading journals and conferences, including T-PAMI, IJCV, JMLR, AAAI, IJCAI, CVPR, ICCV, ECCV, NIPS, ICML, ICDM; and ACM SIGKDD, with best paper awards, e.g. the 2018 IJCAI distinguished paper award, the 2014 ICDM 10-year highest-impact paper award, and the 2017 IEEE Signal Processing Society Best Paper Award. He is a highly-cited researcher in both engineering and computer science, and has an H-index 100. He received the 2015 Australian Scopus-Eureka Prize and the 2018 IEEE ICDM Research Contributions Award. He is a Fellow of the Australian Academy of Science and a Fellow of the IEEE, AAAS, IAPR and OSA.