ABSTRACT
Due to the characteristics of web data and the change of men-machine interaction mode in the web age, artificial intelligence and information processing encounter new challenges and requirements. The new demand is that information processing has to deal with the meaning or semantics of information. Traditional information processing only treats the form of information rather than the meaning. Artificial intelligence intends to handle information as that of human beings, which makes machines to deal with the meaning or to understand the information. This talk presents new artificial intelligence technologies in the context of text and image processing, as well as intelligent robots. We will discuss how artificial intelligence may face the opportunity and challenge, and what strategy we will adopt to deal with them.

Keywords: Artificial intelligence, web intelligence, intelligent information processing, text, image, semantics, intelligent robots

ABOUT THE KEYNOTE SPEAKER
Bo Zhang is professor of computer science in Department of Computer Science and Technology at Tsinghua University, and the fellow of Chinese Academy of Sciences. In 1958 he graduated from Automatic Control Department of Tsinghua University, and became a faculty member since then. From 1980/02 to 1982/02, he visited University of Illinois at Urbana-Champaign, USA as a scholar. In 2011, Hamburg University awarded him Honorary Doctor of Natural Sciences. He is now the member of Technical Advisory Board of Microsoft Research Asia.

He is engaged in the research on artificial intelligence, artificial neural networks, machine learning, and so on. And he also is engaged in the research applying technology that applies the theories mentioned above into pattern recognition, knowledge engineering, and robotics. In these fields, he has published over 200 papers and 5 monographs (chapters). His monograph involved “Theory and Applications of Problem Solving” in Chinese/English version won the special-class prize of excellent academic monograph from College and University Press awarded by State Educational Commission. His academic achievement won ICL European Artificial Intelligence Prize, etc. In addition, he took part in building up the State Key Lab of Intelligent Technology and Systems and served as director of the lab from 1990 to 1996.

Recently, he has found a research group for cognitive computation and multimedia information processing. The group has got some important results in machine learning, image and video analysis and retrieval.