

## Invited Talk

### Efficient Intelligent Computing on Edge Devices

Jian Cheng

Professor, Institute of Automation, Chinese Academy of Sciences

In recent years, intelligent computing with deep learning has made significant progress and rapidly gained industrial applications. These deep learning technologies have become indispensable key technologies in numerous intelligent systems and applications. At the same time, the computational complexity and resource consumption of deep neural networks continue to increase with higher performance, which poses huge challenges to the deployment of intelligence systems on edge devices. This talk will introduce those challenges and solutions for edge intelligent computing from a model compression perspective.



**Biograph:** Dr. Jian Cheng is a professor of Institute of Automation, Chinese Academy of Sciences. He received the B.S. and M.S. degrees in Mathematics from Wuhan University in 1998 and 2001, respectively. After that, he got Ph.D degree in pattern recognition and intelligent systems from Institute of Automation in 2004, Chinese Academy of Sciences. His current major research interests include efficient intelligent computing, computer vision, AI chip design, etc. He has authored or co-authored more than 100 academic papers published on top journals or conferences, such as IEEE TPAMI/TIP/TNNLS/TCAD/TMM, JMLR, NeurIPS, ICML, ICLR, CVPR, ICCV, ECCV, AAI. He has been awarded LU JIAXI Young Talent award from Chinese Academy of Sciences, the first class prize of Natural Sciences from Chinese Institute of Electronics.