



香港浸會大學  
HONG KONG BAPTIST UNIVERSITY  
計算機科學系  
Department of Computer Science

# Department of Computer Science Distinguished Lecture Series 2015/16

## Artificial Intelligence: Key to Chinese Manufacturing 2025



**Prof. Tieniu Tan**

Center for Research on Intelligent Perception  
and Computing  
National Lab of Pattern Recognition  
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Chinese Academy of Sciences

**4:30 - 5:30pm | Mar 22, 2016 | Tuesday**  
WLB210, Wing Lung Bank Building, Shaw Campus

### Abstract

For many years, China has been seen as the 'world factory' because of cheap labor and large market, and the manufacturing industry remains to be the backbone of the Chinese economy. However Chinese manufacturing industry faces grand challenges due to increasing labor costs, environmental constraints, etc. The Chinese Manufacturing 2025 strategy is a timely response to these challenges. This talk starts with a brief overview of the status quo of the Chinese manufacturing industry and outlines the Chinese Manufacturing 2025 strategy. It focuses on discussing why artificial intelligence is the key to the success of the strategy. Some promising AI progress, innovations and directions relevant to the strategy are described in this context such as brain-inspired AI, big data driven AI, AI chips and sensors, hybrid intelligence, intelligent-DIY, AI as a service, etc.

### Biography

Tieniu Tan received his B.Sc. degree in electronic engineering from Xi'an Jiaotong University, China, in 1984, and his MSc and PhD degrees in electronic engineering from Imperial College London, U.K., in 1986 and 1989, respectively.

In October 1989, he joined the Department of Computer Science, The University of Reading, U.K., where he worked as a Research Fellow, Senior Research Fellow and Lecturer. In January 1998, he returned to China to join the National Laboratory of Pattern Recognition (NLPR), Institute of Automation of the Chinese Academy of Sciences (CAS) as a full professor. He was the Director General of the CAS Institute of Automation from 2000-2007, and the Director of the NLPR from 1998-2013. He is currently Director of the Center for Research on Intelligent Perception and Computing at the Institute of Automation and also serves as Deputy Secretary-General of the CAS and the Director General of the CAS Bureau of International Cooperation. He has published more than 450 research papers in refereed international journals and conferences in the areas of image processing, computer vision and pattern recognition, and has authored or edited 11 books. He holds more than 70 patents. His current research interests include biometrics, image and video understanding, and information forensics and security.

Dr Tan is a Member (Academician) of the Chinese Academy of Sciences, Fellow of The World Academy of Sciences for the advancement of sciences in developing countries (TWAS), an International Fellow of the UK Royal Academy of Engineering, and a Fellow of the IEEE and the IAPR (the International Association of Pattern Recognition). He is Editor-in-Chief of the International Journal of Automation and Computing. He has given invited talks and keynotes at many universities and international conferences, and has received numerous national and international awards and recognitions.



### Enquiry

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