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### 講者簡介 Speaker Profile

梅宏，現任北京理工大學常務副校長。中國科學院院士，發展中國家科學院院士，歐洲科學院外籍院士，電氣和電子工程師學會會士（IEEE Fellow）。

1980年至1987年，在南京航空學院學習，先後獲計算機應用學士學位及計算機軟件碩士學位；1989年至1992年，在上海交通大學學習，獲計算機軟件博士學位。1987年至1989年在南京航空學院工作，任計算機科學與工程系助教；1992年至1994年在北京大學計算機科學技術博士後站從事博士後研究；1994年至2013年，在北京大學工作，歷任計算機科學技術系副研究員、教授，信息科學技術學院副院長、院長；2013年至2016年任上海交通大學副校長；2016年至今，任北京理工大學副校長、常務副校長。

科研成果曾獲國家技術發明一等獎、國家自然科學二等獎、國家技術發明二等獎、國家科技進步二等獎等。2015年獲電氣和電子工程師學會計算機分會技術成就獎（IEEE Computer Society Technical Achievement Award）。

主要從事軟件工程和系統軟件領域的研究，在構件化軟件中間件、開發方法學和工具環境等方面取得了系列成果。發表學術論文150餘篇，獲國家技術發明專利授權數十項，承擔了數十項國家級科研項目。

歷任國家863計劃專家組成員、組長，國家“核高基”科技重大專項專家組成員，全國信息技術標準化技術委員會大數據標準工作組組長，國家重點科技研發專項“雲計算和大數據”實施方案編制組組長、總體組組長，國家“科技創新2030-重大項目”大數據重大項目立項建議和實施方案編制組組長。

**Mei Hong** is the executive vice president of Beijing Institute of Technology. He also serves as academician of the Chinese Academy of Sciences; member of the World Academy of Sciences for the Advancement of Science in Developing Countries, foreign academician of Academia Europaea; and fellow of the Institute of Electrical and Electronics Engineers (IEEE).

From 1980 to 1987, Mei studied at Nanjing University of Aeronautics and Astronautics where he received a bachelor's degree in computer engineering and a master's degree in computer software. From 1989 to 1992, he pursued his PhD in computer software at Shanghai Jiao Tong University. He worked as teaching assistant in the Department of Computer Science and Engineering at Nanjing University of Aeronautics and Astronautics from 1987 to 1989, and post-doctoral research fellow in the Department of Computer Science and Technology at Peking University from 1992 to 1994. During his term at Peking University from 1994 to 2013, he served as associate researcher and professor of the Department of Computer Science and Technology, as well as vice dean and dean of the School of Electronics Engineering and Computer Science. Between 2013 and 2016, he was vice president of Shanghai Jiao Tong University. Since 2016, he has served Beijing Institute of Technology as vice president and executive vice president.

His research output has won him the first and second prizes in the National Technology Invention Awards, the second prizes in the National Natural Science Awards, the second prizes



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in the National Science and Technology Progress Award, and so on. In 2015, he was presented the IEEE Computer Society Technical Achievement Award.

Mei has mainly engaged in the research of software engineering and system software, making outstanding achievements in component-based middleware, development methodology and tool environment. He has published more than 150 academic papers, obtained dozens of national technology invention patents, and spearheaded dozens of national-level research projects.

He has served as panel member and team leader of National 863 High-Tech R&D Program; panel member of the major national science and technology project: core electronic devices, high-end general chips and basic software products; leader of the big data standardisation working group of the National Information Technology Standardization Network; leader of the action planning group and the general working group of the national key research and development program: cloud computing and big data; and leader of the project proposal and action planning team of the Major National Big Data Project: 2030 --- major science and technology innovation project.

### 講題摘要 Topic Outline

#### 大數據：技術及應用

#### **Big Data: Technology and Application**

大數據現象源於互聯網及其延伸所帶來的無處不在的信息技術應用，以及信息技術的不斷廉價化。近年來，大數據蘊含的巨大應用價值和潛力已被廣泛認知和期待，並興起了大數據研究和應用的熱潮，我們正在步入大數據時代。本報告將探討大數據的內涵和本質，結合成功應用案例闡述大數據蘊含的重要價值和意義，並小結當前應用的特點；通過回顧信息技術的發展來理解大數據所帶來的信息化新階段，以及正在成型展開的新經濟形態：數字經濟；簡介大數據的發展歷程及現狀，分析大數據對信息技術體系帶來的挑戰，並分享若干思考。

The Internet and its expansion have made information technology widely applicable and affordable, which has given rise to the big data phenomenon. The widespread recognition and anticipation of the enormous value and potential of big data in recent years have resulted in a boom of big data research and application. We are now ushering into the era of big data. The speaker will talk about the essence and nature of big data; the significance of big data with reference made to successful examples of its application; and the characteristics of current application. A look-back on the development of information technology will help us understand the new phase of informationisation arising from big data, and an emerging economy, namely digital economy. He will also briefly introduce the past and the present of big data development, analyse the challenges that big data poses to the information technology system, and share some of his insights.