Plenary Industrial Forum: The Future of Smart Life

Plenary Speakers:
Yi Hao, President, *TCL Multimedia, China*
Kevin Jou, *CTO and Corporate VP, MediaTek, Taiwan*
Benoit Schillings, *Vice President & Technical Fellow, Yahoo!, USA*
Yasunori Mochizuki, *Vice President, NEC, Japan*

Moderator:
Qian Zhang, *Hong Kong University of Science and Technology (Hong Kong)*

Date: Friday, 18 December 2015
Time: 16:00 - 17:30
Place: Room V322

Abstract:
In this Plenary Industrial Forum, we invite top executives of world leading companies and organizations in the general ecosystem of future Smart Life, covering the aspects of chip, device, software and system solution, content, applications and services, to share their vision and insights to the bright future of our lives. They will highlight the potential trends and challenges from technology and business perspective in the areas.

Biographies

Yi Hao

President, TCL Multimedia, China
Mr. Yi Hao is currently the President of TCL Multimedia Technology Holdings Ltd. and Vice President of TCL Corporation. He is a world-recognized pioneer in crossborder/culture business development, and a very experienced leader in consumer electronics, automotive and on-line gaming industry. He joined TCL Corporation in 2004 and took on several key positions within the organization including General Manager of the Overseas Business Center, Chief Sales Officer and Vice President of the TCL Multimedia, and the Chief Executive Officer of TCL Multimedia. Under his great leadership, TCL Multimedia has become the world 3rd largest TV maker.

Mr. Hao earned a Bachelor's degree in Economics from York University (Canada) and EMBA degree from Cheung Kong Graduate School of Business.

Kevin Jou
CTO and Corporate Vice President, MediaTek, Taiwan

Dr. Jou is a Corporate Vice President and the Chief Technology Officer at MediaTek Inc., the third largest fabless semiconductor company in the world with leading products in cellular phones, tablets, wireless connectivity, home

entertainment, and optical storage. In addition to providing guidance to the company's technology and business strategies, he oversees its communication system, computing system engineering, and multimedia design teams as well as the corporate technology office. The communication system design team is responsible for architecture and algorithm design for all modem related projects in the company, including cellular (2G, 3G, and 4G), WiFi, Bluetooth, NFC, digital TV, digital FM, Ethernet, and digital RF systems. The computing system engineering team works on computing platform and system software, graphic processors, and low power technologies for smartphones and tablets. The multimedia design team's scope encompasses audio, image, and video signal processing, display technologies, and computer vision, with applications to the company's smartphone, tablets, TV, Blu-ray Disc player, and automotive products. The corporate technology office is engaged in advanced research and development in various areas related to smart devices and wearable bioelectric devices. The corporate technology office also oversees sponsored university researches and joint programs with research institutes and government agencies.

Before joining MediaTek in 2011, Dr. Jou spent nearly 22 years at Qualcomm Incorporated. He was involved in the design and development of the original CDMA prototype system, the IS-95 standard, and several early CDMA base station and mobile station modem chips. He was a key contributor to the design and standardization of the third generation (3G) cellular systems, including leading the development of CDMA2000 standards for voice and packet data services. In particular, Dr. Jou was innovative in applying interference cancellation techniques and intelligent signal transmission to wireless voice communications, which resulted in a system with industry-leading voice capacity up to this date. He was also involved in the design of the Globalstar LEO satellite communication system. Dr. Jou played a major role in Qualcomm's technical and business activities in the Greater China area. He served as Qualcomm China's Chief Technology Officer from 2003 to 2005.

Dr. Jou received a Bachelor of Science degree in electrical engineering from National Taiwan University in 1982 and Master of Science and Ph. D. degrees, both in electrical engineering, from the University of Southern California in 1985 and 1989, respectively.

Benoit Schillings
Vice President and Technical Fellow, Yahoo!, USA

Benoit Schillings has been a Fellow at Yahoo! since 2012, after being Chief Technology Officer at the Myriad Group. He is known for being one of the lead developers of the Be Operating System (BeOS), following an association with Be Inc. that began in 1990 as a developer of software for the Apple Macintosh. Schillings became the second engineer at Be, working on the operating system for a new computer called BeBox. Starting in 1991 he developed a file system and an associated user-space database application that indexed the metadata in the file system as well as a graphics system and programming frameworks used by software developers to write software for the Be operating system. From Be, Schillings became CTO at OpenWave where, with Mike Reed, he led a team that developed Version 7 of the Openwave Phone Suite of mobile applications. In 2005 he joined Trolltech as a Distinguished Engineer, and after Nokia acquired Trolltech in 2008, Schillings became a chief technologist at Nokia working on hybrid programming models and Symbian/Qt integration. In

2009 he moved to the Myriad Group, and two years later, to Facebook to work on its Android app. Finally, Schillings joined Yahoo!'s mobile team in December 2012.

Yasunori Mochizuki
Vice President, NEC Corporation, Japan

Dr. Yasunori Mochizuki is Vice President of Central Research Laboratories (CRL), NEC Corporation since June, 2011 and is responsible for the management and/or coordination of cloud-related research activities covering computing architecture, networking, applications and services. Before being appointed as VP, he was General Manager of Information and Media Processing Laboratories in CRL from 2010, where he led the research groups on video object recognition, audio/video signal processing, speech recognition, natural language processing,
data mining, and security technologies. Since April, 2013, he is also a General Manager of Corporate Technology which is responsible for corporate-wide strategy on technologies for NEC. Yasunori Mochizuki received his BS, MS, and PhD degrees in Electronic Engineering from the University of Tokyo in 1982, 1984 and 1987, respectively. In 1987, he joined NEC Corporation (Fundamental Research Laboratories) as a research taff on semiconductor solid state physics.
He was also a Visiting Associate Professor of University of Tsukuba (Physics Department) from 1997 to 2001. From 2000 through 2009, he was a manager in the research department for Silicon LSI technologies, for which he was appointed to be General Manager in 2007. Dr. Mochizuki is a fellow of Japan Society of Applied Physics.

Qian Zhang
Professor, Hong Kong University of Science and Technology, Hong Kong

Dr. Zhang joined Hong Kong University of Science and Technology in Sept. 2005 where she is a full Professor in the Department of Computer Science and Engineering. She is also serving as the co-director of Huawei-HKUST innovation lab and the director of digital life research center of HKUST. Before that, she was in Microsoft Research Asia, Beijing, from July 1999, where she was the research manager of the Wireless and Networking Group. Dr. Zhang has published more than 300 refereed papers in international leading journals and key conferences in the areas of wireless/Internet multimedia networking, wireless communications and networking, wireless sensor networks, and overlay networking. She is the inventor of about 30 pending International patents. Her current research is on cognitive and cooperative networks, dynamic spectrum access
and management, as well as wireless sensor networks. She also participated many activities in the IETF ROHC (Robust Header Compression) WG group for TCP/IP header compression. She is a Fellow of IEEE for "contribution to the mobility and spectrum management of wireless networks and mobile communications". Dr. Zhang has received MIT TR100 (MIT Technology Review) world's top young innovator award. She also received the Best Asia Pacific (AP) Young Researcher Award elected by IEEE Communication Society in year 2004. She received the Best Paper Award in Multimedia Technical Committee (MMTC) of IEEE Communication Society in 2005 and Best Paper Award for QShine 2006, IEEE Globecom 2007, IEEE ICDCS

2008, IEEE ICC 2010, and IEEE Globecom 2012. She received the Oversea Young Investigator Award from the National Natural Science Foundation of China (NSFC) in 2006. She holds the Cheung Kong Chair Professor in Huazhong University of Science and Technology (2012-2015). She has been elected as IEEE Communication Society Distinguished Lecture from Jan. 2010 to Dec. 2011.

Dr. Zhang is the Editorial Board Member of IEEE Transactions of Multimedia, IEEE Transactions on Mobile Computing, IEEE Wireless Communications Magazine, IEEE Communications Surveys and Tutorials, Elsevier Computer Communications, and Elsevier Computer Networks. She was also served as the Associate Editor for IEEE Transactions on Wireless Communications and IEEE Transactions on Vehicular Technologies. She served as Guest Editor for special issue on wireless video in IEEE wireless Communication Magazine, special issue on Cross-layer Optimized Wireless Multimedia Communications in IEEE Journal on Selected Areas in Communications (JSAC), special issue on Wireless Sensor Networking in IEEE Wireless Communication Magazine, special issue on Wireless Multimedia Sensor Networks in Elsevier Computer Networks, special issue on Wireless Mesh Networks in ACM/Springer Journal of Mobile Networks and Applications (MONET), feature topic on Advances in Wireless VoIP in IEEE Communications Magazine, special issue on Quality-Driven Cross-Layer Design for Multimedia Communications in IEEE Transactions on Multimedia, and special issue on Cooperative Networking -- Challenges and Applications in IEEE Journal on Selected Areas in Communications (JSAC).

Dr. Zhang was the Chair of the Multimedia Communication Technical Committee of the IEEE Communications Society from 2008 to 2010. She was the Chair of Chapter Coordination Committee and Technical Activity Committee of IEEE Asia Pacific Board (APB) of IEEE Communication Society. Dr. Zhang is also a member of the Visual Signal Processing and Communication Technical Committee and the Multimedia System and Application Technical Committee of the IEEE Circuits and Systems Society.