**Microsoft Research**

**MSRA Academic Day 2017**

**Breakout Talks\***

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| **University** | National Cheng Kung University | C:\Users\user\AppData\Local\Microsoft\Windows\INetCache\Content.Word\LienJj_Cut_2006.jpg |
| **Professor** | Vice Chairman of CSIE and Director of IMIS, NCKU  Jenn-Jier James Lien (連震杰) |
| **Short Bio** | Professor Lien did Ph.D. thesis research in facial expression recognition at RI, CMU, USA from 1993 to 1998. From 1999 to 2002, he joined L1-Identity. The R&D team he joined has won the 2000 and 2002 DARPA FERET Face Recognition Competitions: No.1. In addition, his team developed a real-time stereo system for face recognition at a distance for US$5M DARPA surveillance grant in 2000. He joined NCKU, Taiwan in 2002. His student team cooperated with TongTai and worked on AOI for several biggest TFT-LCD and solar cell local companies since 2004. His team started to cooperate with Texas Instruments and Advantech and develop embedded computer vision technologies for the markets of ADAS (Advanced Driver Assistance System), surveillance and human-computer interactions in 2009. Since 2014, his team worked with TongTai Machine & Tool Corp. and HiWin Technologies Corp. and developed deep learning technologies in the fields of DLP 3D inspection and reconstruction, robot arm grasping, and tool wear monitoring and life prediction for industry 4.0. | |
| **Talk title** | From Stereo-Based LEGO Robot Control to Deep Learning-Based Robotic Grasping Control | |
| **Abstract** | I would like to briefly share the cooperation experiences of surveillance, human-computer interactions (HCI), and automatic optical inspection (AOI) between academy and industry since 1993. Then this talk will focus on our academy and industry results of visual servo control using RGB-D camera for LEGO robot control (in 2013) and deep learning-based robotic grasping control (on-going). | |

\*Breakout talks are the main session of MSRA Academic Day 2017 event and consisted of 20-30 min presentation and Q&A.