Cloud Big-Data Analytics for Cognitive Deep Learning

Kai Hwang (黄铠)
University of Southern California

Abstract: In this talk, Dr. Hwang addresses the pervasive use of big-data analytics on smart clouds, social networks, intelligent robots, and IoT platforms. He will assess machine/deep learning models and available software tools to advance the cognitive service industry represented by Google, Apple, Nvidia, Baidu, Intel, and IBM, Huawei, etc. The ultimate goal is to achieve enhanced agility, mobility, security, and scalability of public clouds, IoT platforms, and popular social-media networks.

His talk assesses current AI programs and brain projects pursued by high-tech companies, including Google X-Lab, TensorFlow, DeepMind AlphaGo, Nvidia Digits 5 for using GPU in deep learning, IBM neuromorphic computer, and CAS/ICT Camericon project, etc. Some hidden R/D opportunities are revealed for building smart machine, delivery drones, self-driving cars, blockchains, AR/VR gears, and mobile cloud of everythings.

Biographical Sketch: Kai Hwang is a Professor of EE/CS at the Univ. of Southern California. He received the Ph.D. from UC Berkeley. He has published extensively in computer architecture, parallel processing, cloud computing, and network security. His latest two books, Cloud Computing with Machine Learning (MIT Press) and Big Data Analytics for Cloud/IoT and Cognitive Learning (Wiley, U.K.) are in press to appear in 2017.

An IEEE Life Fellow, he received the very-first CFC Outstanding Achievement Award in 2004 and the Lifetime Achievement Award from IEEE Cloud2012 for his pioneering work in parallel computing and distributed systems. Four of his graduated Ph.D. students were elected as IEEE Fellows and one an IBM Fellow. He has delivered four dozens of keynote or distinguished lectures in international Conferences or Research Centers. Dr. Hwang has performed consulting work with IBM, Intel, MIT Lincoln Lab, Caltech JPL, Chinese Academy of Sciences, and INRIA in France. He can be reached via Email: kaihwang@usc.edu.