Keynote Speaker

Visualization for Deep Learning Training

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Abstract

The enormous successes of deep learning in many domains such as video, audio, speech, text, sequence, etc. has swept the academia and industry alike, to the extent that many are touting deep learning training as an alternative form of programming future applications. Amid this excitement lies a more sombre question: if training for deep learning models is compared to software coding, what is the integrated development environment (IDE) for deep learning training? Specifically, what are the debugging and analysis tools required for manually refining and evolving a deep learning model towards its final form? In this presentation, I will survey related work in this area and outline the visualization requirements of a deep learning IDE that we are currently working on.

Bio

Dr. Tzi-cker Chiueh is currently the General Director of Information and Communications Laboratories at Industrial Technology Research Institute and Research Professor in the Computer Science Department of Stony Brook University. He received his BSEE from National Taiwan University, MCS from Stanford University, and Ph.D. in CS from University of California at Berkeley in 1984, 1988, and 1992, respectively. He received an NSF CAREER award, and several best paper awards, including the 2008 IEEE International Conference on Data Engineering (ICDE), the 2013 ACM Systems and Storage (SYSTOR) conference and the 2015 ACM Symposium on Virtual Execution Environments (VEE), Before joining ITRI, Dr. Chiueh served as the director of Core Research in Symantec Research Labs. Dr. Chiueh has published over 200 refereed conference and journal papers in the areas of data center networking, large-scale storage systems, and software security.