

NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

C S S E M I N A R

Title: The Impact of Computer Architectures on the Performance of Deep-Learning Applications

Speaker: Prof. Avi Mendelson
 Visiting Professor
 Electrical Engineering and Computer Science Department
 Technion - Israel Institute of Technology

Date/Time: 30 March 2017, Thursday, 10:30 AM to 12:00 PM

Venue: SR@LT19

Chaired by: Dr Mitra, Tulika, Professor, School of Computing
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Abstract:

Machine learning is being used in many applications ranging from computer gaming (e.g., Kinect) and up to search machines and voice recognition, thus such applications can be executed on vary kind of computational environments starting from FPGA or ASIC and up to servers running on the cloud. In this talk I will present power and performance implications when running machine learning algorithms on different hardware configurations, such as many-cores, GPGPU and FPGAs

Biodata:

Prof. Avi Mendelson is a visiting professor at the EE and CS departments, Technion - Israel Institute of Technology. He has a blend of industrial and academic experience in several different areas such as computer architecture, hardware security, operating systems, power management, reliability, and high-performance computing.

He received a PhD in computer engineering from the University of Massachusetts at Amherst (UMASS) in 1990. Among his industrial jobs, he worked for 11 years as a senior researcher and principle engineer at Intel. Among his achievements at Intel, he was the chief architect of the CMP (multicore-on-chip) feature of the first dual core processors Intel developed. Mendelson has published more than 120 papers in refereed journals, conferences, and workshops. He is a member of the Board of Governors of the IEEE Computer society, he completed a full term as an associate editor of IEEE Computer Architecture Letters (CAL) and now serves as an associate editor of IEEE Transactions on Computers. He served as program chair of different major conferences and as the general chair of the ISCA

(International Symposium on Computer Architecture) in 2013.