More information:

Registration:

ncts.tw
TEL: 02-33668814
E-mail: murphyyu@ncts.tw

2018 NCTS Summer Course: Introduction to Parallel Computing (II)

In order to make full use of modern supercomputer systems with multicore/manycore architectures, hybrid parallel programming with message-passing and multithreading is essential. While MPI is widely used for message-passing, OpenMP for CPU and OpenACC for GPU are the most popular ways for multithreading on multicore/manycore clusters. In this 4-day course, we focus on optimization of single node performance using OpenMP and OpenACC for CPU and GPU. We “parallelize” a finite-volume method (FVM) code with Krylov iterative solvers for Poisson’s equation on Reedbush supercomputer at the University of Tokyo with 1.93 PF peak performance (http://www.cc.u-tokyo.ac.jp/system/reedbush/index-e.html), which consists of the most recent CPU’s (Intel Xeon E5-2695 v4 (Broadwell-EP)) and GPU’s (NDIVIA Tesla P100 (Pascal)).

Time : 9:00-12:00, 13:00-17:00, July 16 - 19, 2018

Venue : Room 440, Astro-Math Bldg., NTU

Speaker:
Kengo Nakajima (University of Tokyo)
Tetsuya Hoshino (University of Tokyo)

Organizers:
Tsung-Min Huang (National Taiwan Normal University)
Wen-Wei Lin (National Chiao Tung University)
Yu-Chen Shu (National Cheng Kung University)
Weichung Wang (National Taiwan University)