Outline and purpose of the class

This course reviews supercomputing systems from both aspects of hardware and software. The course talks about the importance of parallel processing, parallel system architectures, parallel algorithm design, parallel programming, and performance evaluation methodologies. The course also discusses the memory systems necessary for supercomputing. See the class web page http://www.sc.cc.tohoku.ac.jp/class/uhsipa/ for more details. (Contact instructors to have an access ID)

Study Plan

Will be introduced in the first lecture

Method and criteria for grade assessment

Evaluated based on the results of two or three home assignments as mid-term and final exams

Textbooks / reference books

1. Parallel Programming in C with MPI and OpenMP  * Machael J. Quinn  * McGraw-Hill Companies, 2002  *
Memory Systems: Cache, DRAM, Disk  * Bruce Jacob, Spencer W. Ng, David T. Wang, and Samuel Rodriguez

Related websites

http://www.sc.cc.tohoku.ac.jp/class/uhsipa/

Office Hour

4:00–5:30pm, every Tuesday (An appointment in advance by e-mail or phone is needed)

Other