

CS3210 Parallel Computing

2013/14 – Semester I

www.comp.nus.edu.sg/~teoym/cs3210-13

Assoc Professor Teo Yong Meng

Room: Com2, #04-39

Email: teoym@comp.nus.edu.sg

Webpage: www.comp.nus.edu.sg/~teoym

Tel: 6516 2830

TA & Lab Tech

TA:

Le Duy **Khanh**

Room: Com2, #B-01

Email: leduykha@comp.nus.edu.sg



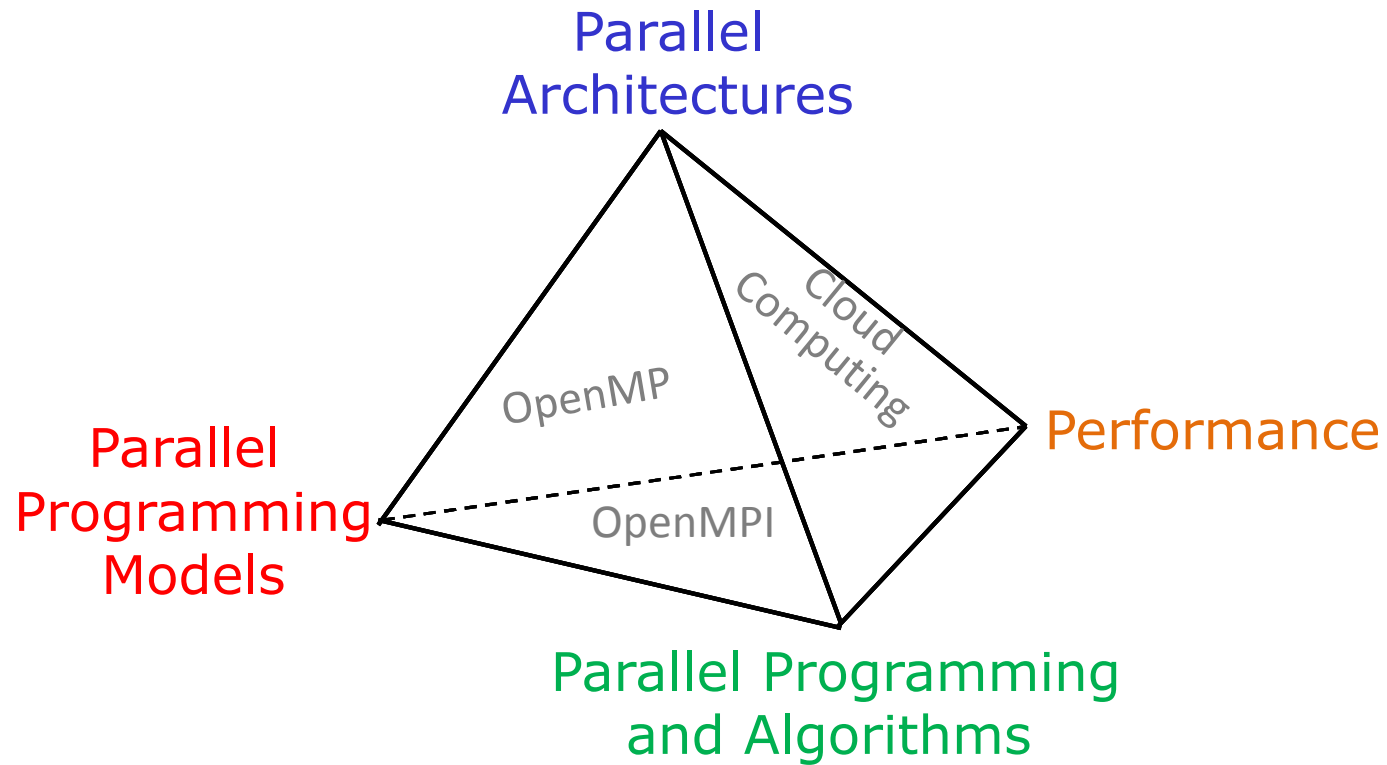
Lab Technologist:

Chan Chee Heng

Room: Com1, #01-01

Email: chanch@comp.nus.edu.sg

What will we cover?



Course Schedule and Webpage

- Lecture: Tue, 2-4pm, Com1, #02-12 (SR3)
- Tutorials and Lab on alternate weeks:
 - Parallel & Distributed Computing Lab, Com 1, #B-01
 - **Group 1**: Wed, 0900-1100 (Khanh/Teo)
Group 2: Wed, 1100-1300 (Khanh/Teo)
 - Hardware in lab is organized into 7 workbenches and each bench is shared among a group of 3 students

Course Schedule and Webpage

- Group discussions & assignments:
Parallel & Distributed Computing Lab, Com2, #B01-01
- Consultation:
Mon, 2-3pm (Khanh)
Wed, 2-3pm (Yong Meng)
- Webpage:
 - IVLE
 - www.comp.nus.edu.sg/~teoym/cs3210-13 for lecture slides, tutorial and lab handouts, and assignments -> userid/password (IVLE announcement)

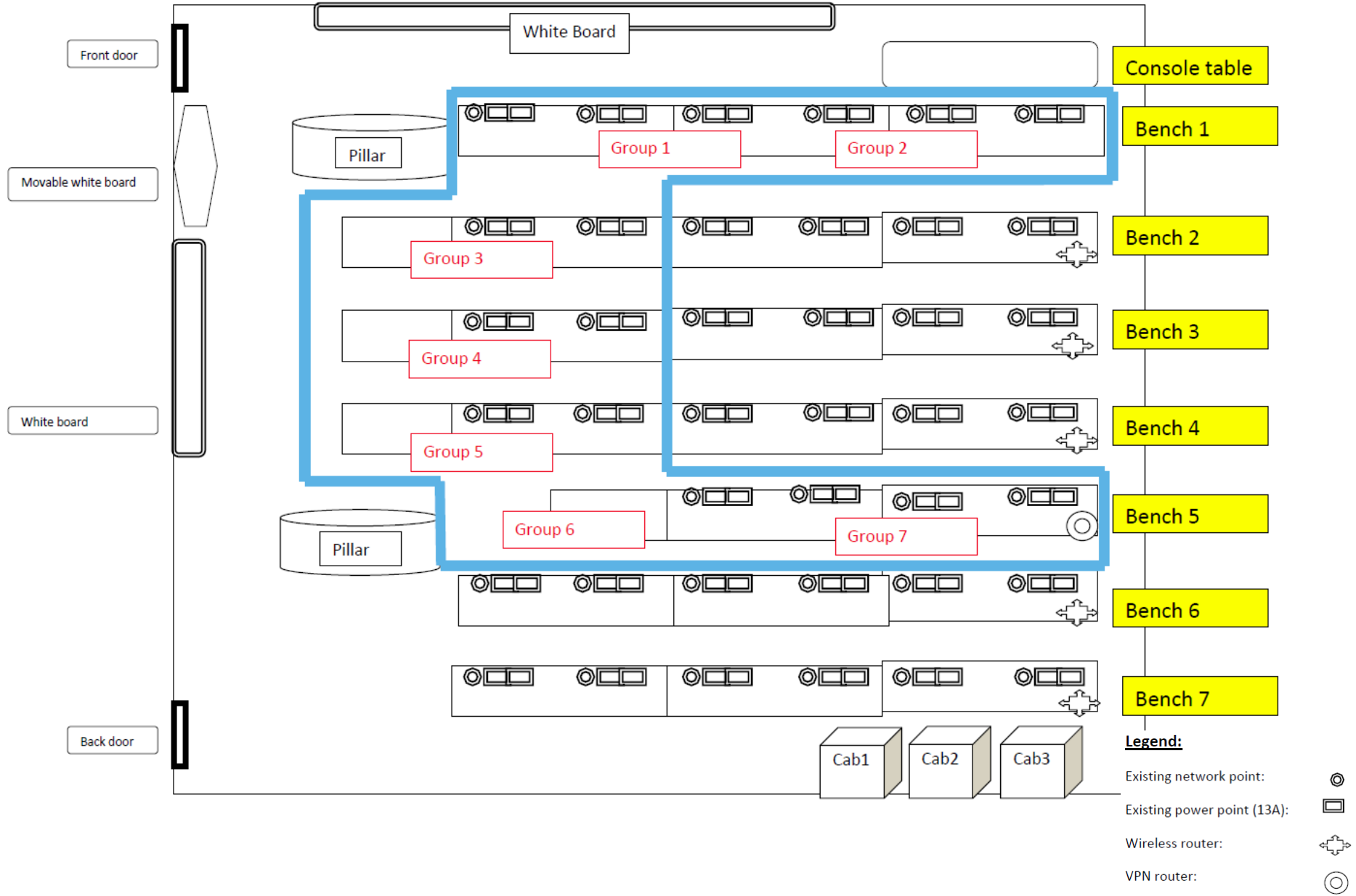
Schedule - <http://www.comp.nus.edu.sg/~teoym/cs3210-13/schedule.htm>

National University of Singapore
 DEPARTMENT OF COMPUTER SCIENCE
CS3210 PARALLEL COMPUTING
 Schedule (AY2013/14 - Semester I)

Wk	Date	Lecture - Tue 2-4pm, COM1 #02-12 (SR3)	Tutorial	Lab - Parallel & Distributed Computing Lab, Com1 #B-01	Others
1	13 Aug	L00: Course Admin L01: Introduction		Lab Layout	
2	20 Aug	L02: Processor & Memory Organization		Lab1: Parallel Computing & Data Centers	
3	27 Aug	L03: Memory Hierarchy & Interconnection Networks		Lab2: Setting up a Parallel Computer Cluster [comments]	
4	3 Sep	L03: Memory Hierarchy & Interconnection Networks	T01: Parallel Computer Architecture - I [solution]		Assignment 1 (15%): (due on xxx) Comments
5	10 Sep	L04: Performance Analysis of Parallel Systems	T02: Parallel Computer Architecture - II [solution]		e-learning week
6	17 Sep	L05: Parallel Programming Models - I -		Lab3: Running Parallel Programs and Instrumentation [comments]	OpenMP Tutorial
Sep 21-29, Recess					
7	1 Oct	L06: Parallel Programming Models - II	T03: Performance of Parallel Systems [solution]		Mid-term Test: [L0x- L0x] (15%)
8	8 Oct	L07: Message-passing Programming		Lab4: Introduction to Message-passing Model [comments]	MPI Tutorial Assignment 2 (20%): (due on xx)
9	15 Oct	Hari Raya Haji		Lab5: Programming in MPI [comments]	
10	22 Oct	L08: Parallel Algorithm Design	T04: Parallel Programming Models [solution]		
11	29 Oct	L09: Cloud Computing	T05: Message-passing Programming [solution]		
12	5 Nov	L10: Conclusion & Revision	T06: Open Session		Check CA Marks
13	12 Nov	Table of Contents			
Nov 16-22, Reading Week					
Examination: 28 November 2013, morning (to be confirmed)					

(updated: 7 August 2013)

Parallel and Distributed Computing Lab(COM1#B-01) Layout



Module Assessment

- Continuous Assessment (60%)
 - Lab (10%)
 - Mid-term Test (15%)
 - Two Assignments (35%)
- Open Book Exam (40%)

Consultation, Questions, Feedback, ...

- Schedule consultation
 - **Group 1**: Wed, 0900-1100 (Khanh)
 - Group 2**: Wed, 1100-1300 (Khanh)
- Lab & Tutorial: 2nd hour open session (optional)
- Sketch of solution: labs, tutorials, test and assignments
- IVLE forum, email

Main Textbook

- *E-book: Parallel Programming for Multicore and Cluster Systems*, Thomas Rauber and Gudula Rünger, 1st Edition, Springer-Verlag, 2010 (NUS Digital Library - <http://linc.nus.edu.sg/record=b2974382>).

