COMP 4009: Parallel Programming for Clusters and Multi-Core Processors

Announcements

* **FINAL EXAM**: Thursday December 5, 2:30 – 4:00, in class (238 Tory)

Course Outline

Introduction to parallel architectures, programming languages and algorithms for processor clusters (clouds) and multi-core processors. Distributed memory architectures, cluster/cloud computing, message passing parallel programming, multi-core processors, shared memory parallel programming, use of thread libraries, parallel performance analysis. Prerequisites: COMP 2402, COMP 2404, COMP 3000.

Course Material

* [Lectures](http://www.scs.carleton.ca/~dehne/teaching/4009/lectures/index.html)
* [Assignments](https://dehne73176131.wordpress.com/teaching/comp-4009/comp-4009-assignments/)
* [Marks](https://dehne73176131.files.wordpress.com/2019/11/4009-marks.pdf)
* [Resources](https://dehne73176131.wordpress.com/teaching/resources/)
* Textbook [OPTIONAL, do NOT buy prior to discussion in class]: “[Elements of Parallel Computing](https://www.amazon.ca/Elements-Parallel-Computing-Eric-Aubanel/dp/1498727891)” by Eric Aubanel – CRC Press, 2016
* [CLR “Algorithms” book chapter on Cilk](http://www.scs.carleton.ca/~dehne/teaching/resources/CLR-book-chapter-on-Cilk.pdf).

Teaching Assistant(s)

* Lars Doyle (LarsDoyle@cmail.carleton.ca)
* Srivathsan Morkonda Gnanasekaran (SrivathsanMorkonda@cmail.carleton.ca)

Office Hours

* Frank Dehne’s Office Hours: Thursdays 4:00-5:00, room HP 5431
* Lars Doyle’s Office Hours: Wednesdays 1:00-2:00, room HP 5336
* Srivathsan Morkonda Gnanasekaran’s Office Hours: Mondays 1:00-2:00, room HP 5336

Student evaluation

* Final exam: 45%
* Midterm: 15%
* 4 Assignments: 10% each (Late penalties. Up to 24 hrs: 10%. 24-48 hrs: 20%. 48-72 hrs: 50%. More than 72 hrs: 100%.)