

CS533: Parallel Computer Architecture
Prof. Josep Torrellas
Spring 2026

Student Information

- Name and email address:
- Major (CS,ECE...) and year of grad. student:
- Probability you will take the course:
- Have you programmed in C before? What was the largest program?:
- Area of interest (Architecture, Operating Systems, Languages, AI...):
- Please answer these questions so that I know the background of the students.
 1. Please explain: cache line size, set-associative cache, write-back cache, memory latency, bus bandwidth.
 2. What are blocking locks and when are they useful?
 3. What is a race condition in a parallel program? Suppose processors 1 and 2 share memory; list all possible values of A and B after the following code is executed:

A = 1; B = 1; Processor 1 executes: A = 0; if (B == 0) then A = 1;	Processor 2 executes: B = 0; if (A == 0) then B = 1;
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