CSCE 713: Advanced Computer Architecture
"Topics in High Performance Parallel Architectures"

Meeting times: Tuesday, Thursday 2:00 – 3:15
Location: Swearingen 2A22

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Office hours: Monday, Wednesday 1:00 – 2:30
(However, stop in anytime I'm here!)

Grading structure:

Presentations	40%
Discussion	20%
Term project	40%

Topics:
Chip multiprocessors (CMP)
System-on-chip architectures
On-chip networks/interconnects
Dynamically reconfigurable/stream architectures

Course organization:

During each class period, one or two students will give a 20-45 minute Powerpoint presentation of a paper of his or her choosing. Students may need to seek additional background information in order to completely understand the ideas presented in the paper.

Paper presentations will be followed by a 10-25 minute class discussion of the paper. This discussion will include technical questions about the paper as well as a review of the paper.

A collection of acceptable papers are available on the course webpage. Each of these papers was published within the past 2 years. I will keep this collection updated throughout the term. If you wish to present a paper that is not listed on the webpage, please send it to me for approval.

By the end of the first week, e-mail me a list of 4 papers in which you are interested. I will keep a schedule on the webpage which will indicate who will present during each class period. Each student who is presenting must e-mail me Powerpoint slides no later than 1 hour prior to the class period corresponding to their presentation.

All students who are not presenting a particular paper must read the paper and e-mail me with at least 5 questions and a brief review. These must also be submitted no later than 1 hour prior to class. The questions and review should be brought up during the discussion of the paper.

During the last 4-6 weeks of class, students will develop a term project. Students may work in teams of any size. The term project could be a closer study of any of the ideas from any of the papers or a survey of papers related to a relevant and specific topic. Students must receive approval for a project idea from me. Depending on each case, student projects will be presented during the last one or two weeks of the term.