Department of Electrical and Computer Engineering
University of Massachusetts, Amherst

697 ST: Efficient, Scalable, and Reliable Software Systems

Course Information:

Class Time: Mon,Wed 2:30–3:45pm
Location: Engineering Laboratory Room 327
Website: `https://people.umass.edu/tongping/teaching/ce697/ce697.html`

Catalog Data:

This is an advanced course. This course will provide a deep understanding on different aspects of software systems, such as performance, scalability, and reliability by reading state-of-the-art papers in the field. The course will combine the lectures and paper readings together.

Prerequisite:

None.

Required Text Books:

None.

Course Description:

This course will cover different aspects of software systems, such as performance, scalability, and reliability. Basically, the instructor will introduce some basic knowledge on different aspects at first, especially on memory management, and then students will present some recent progress in the field. The students will require to write the review for every paper. The course will have two projects, one project that is dedicated for memory management, and a whole-semester project that the students will choose with the following two options: (1) they may design and implement a project that is related to these topics, and then finish a corresponding report/paper; (2) They may write a survey paper on a specified research topic that should go beyond the papers covered in the class.

Grade Policy:

Presentation	30%
Reviewing	20%
Project/Report	50%

Final Grade Distribution:

>= 96	A+	90 - 95.9	A
80 - 89.9	B	70 - 79.9	C
60 - 69.9	D	<= 59.9	F