Advanced Topics in Operating Systems

Instructor:
Zonghua Gu

Logistics

Time: Wed 18:30-20:05pm

Location: Cao Guangbiao West Building 202

Instructor: Zonghua Gu

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Website:

http://www.cs.zju.edu.cn/people/zgu/OS/

Grading Scheme

- Final Exam: 50%
  - Covers PPTs on the website
  - Does not include the papers and videos.
- Project: 50%
  - Each group of 1-3 students
  - I will post some suggested ideas
  - You can also propose your own project idea
    - Can be based on your own thesis topic, as long as it is related to course content
    - Must be approved by me
  - Project report due in final exam week. Minimum 4 pages, in English or Chinese. Do not send me source code.
  - Most students get full 50 points ☺
- 本课程不点名，凭个人兴趣上课，上课提问回答不计分。

Course Topics

- No textbook.
- I will introduce the latest research papers, and give you an overview of the recent research progress on the following topics (tentative):
  - Multicore Architecture
  - Multicore OS
  - Multicore Scheduling & Synchronization
  - GPU Resource Management
  - Security: Android, Browser
  - …
- The course objective is to give a broad overview of the state of the art, instead of digging deep into any specific topic.

Teaching Method

- I will sometimes play and discuss some videos in class, mainly talks from computer systems conferences from USENIX, ACM/IEEE.

- The videos will be put online, along with the slides