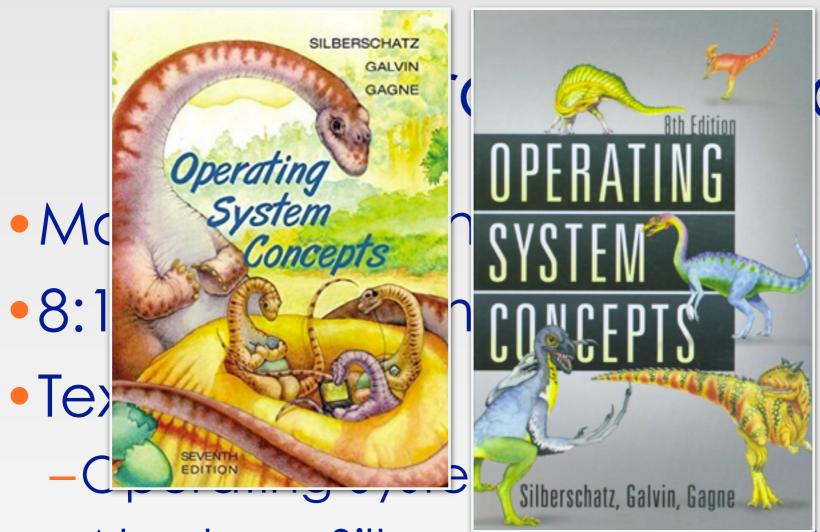
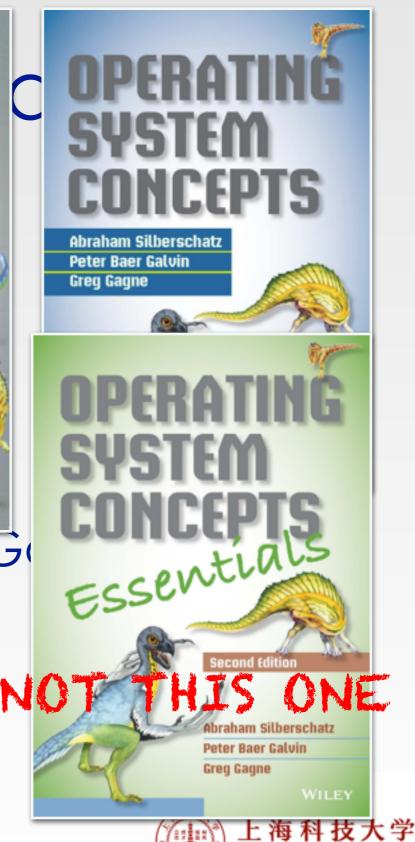


# Operating Systems

Dr. Shu Yin



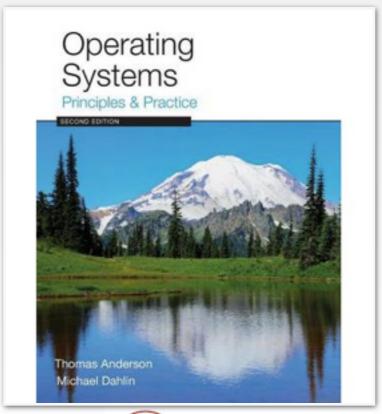
Abraham Silberschatz, Greg Go
Baer Galvin



ShanghaiTech University

## General Information

- Reference 1:
  - -Operating System: Principle and Practice
  - -Thomas Anderson, Michael Dahlin
- Reference 2:
  - -PintOS Manual





# Grading

- The Final Grade Consists Followings:
  - -Homework Assignments: 10% (5% each)
  - -Programming Projects: 50% (12.5% each)
  - -Midterm Exam: 10%
  - -Final Exam: 25%
  - -Participation: 5%
  - -MISSING Midterm or Final Exam Leads to Failing this Course Automatically



### The Course

- Two Lectures Every Week
- One Recitation Every Week
- Two Homework Assignments
- Two Tests: Mid+Final
- Four Projects



# Cheating Policy

Working with others on assignments is a good way to learn the material and is encouraged. However, there are limits to the degree of cooperation that is permitted. Students may discuss among themselves the meaning of homework problems and possible approaches to solving them. Any written portion of an assignment, however, is to be done strictly on an individual basis.

**BOTTOM LINE:** You may not copy from another student or from any other source, and you may not allow another student to copy your work!! Any violation of the above is considered to be cheating and will result in a reduced or a failing grade in the class.

Also, if your class rank in the assignments is significantly different from your class rank in the exam, only your rank in the exam will count towards your grade.



# Homework Assignments

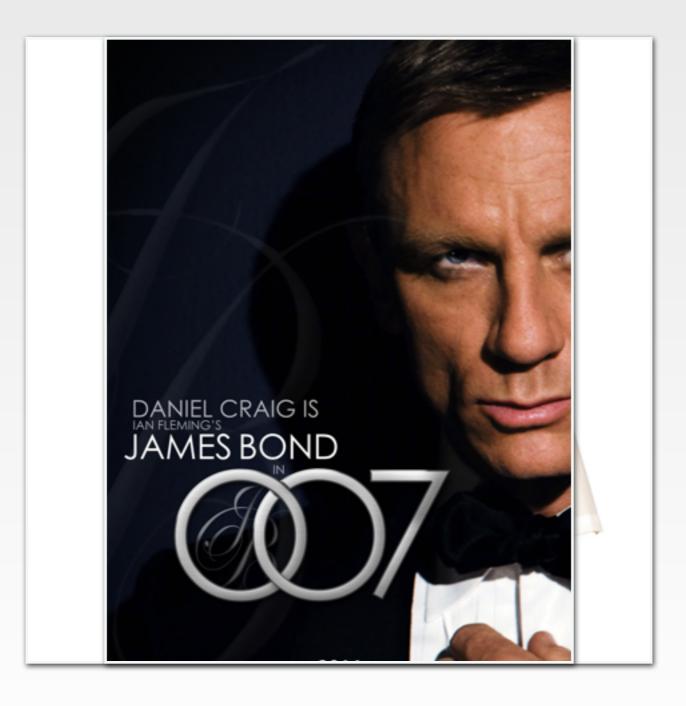
- Posted by the End of Lectures on Weds.
- Deadline: the Start of class on Monday.
- Turn in Responses on Paper.
- LATE SUBMISSIONS will not be graded, (unless extenuating circumstances are present) and you will receive ZERO on that submissions.



#### Who Am I?

- Dr. Shu Yin
- Research Interests:
  - Parallel Storage Systems
  - -High Performance File Systems
  - -Energy-Efficiency, Reliability
- Office: 1A-504A
- Office Hour: 10-11am, Monday/ Arrange by Email
- Email: yinshu@shanghaitech.edu.cn

## What Can We Do?





## What Is This Course?

- Operating Systems
  - -What they are
  - -Design decisions
  - -Actual construction



# Why Study OS?

- You don't have other choices.
- An essential part of any computer systems.
- Many of you will create systems that utilize the core concepts in OSs
- You will build applications that utilize OSs



## What Will We Learn?

- Overview of OSs
- Process Management
- Memory Management
- Storage Management
- Protection and Security
- Distributed Systems
- Special-Purpose Systems



## What Is Our Goal?

- To Understand
- To Prepare
- To Practice



# Prerequisite

- Computer Organization & Architecture
- C/ C++



## How To Achieve These Goals?

- Attend Class
- Finish Homework
- Work on the Project
- Ask Questions



#### Lab0

- Install and Setup PintOS on Your Own Machine
- Write A Report Describing:
  - -General Installation Processes
  - -Problems Encountered during the Installation
  - -Solutions to the Problems Encountered

