

# Computer Graphics

## An Overview

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Welcome to  
the World of Computer Graphics

# Course Objectives

- Fundamental course
- You will know:
  - Fundamental problems addressed by CG
  - Basic principles and methods
  - Basic programming skills for developing CG systems.
  - To cultivate the habit and ability to solve problem on one's own legs





# 勿在浮沙筑高台





# Course Objectives

- While the course is NOT a graphics programming tutorial
- The assignments and active participation in projects will ensure that you acquire very good graphics programming skills using OpenGL.

What is not about?

Photoshop, AutoCAD, Maya, Renderman

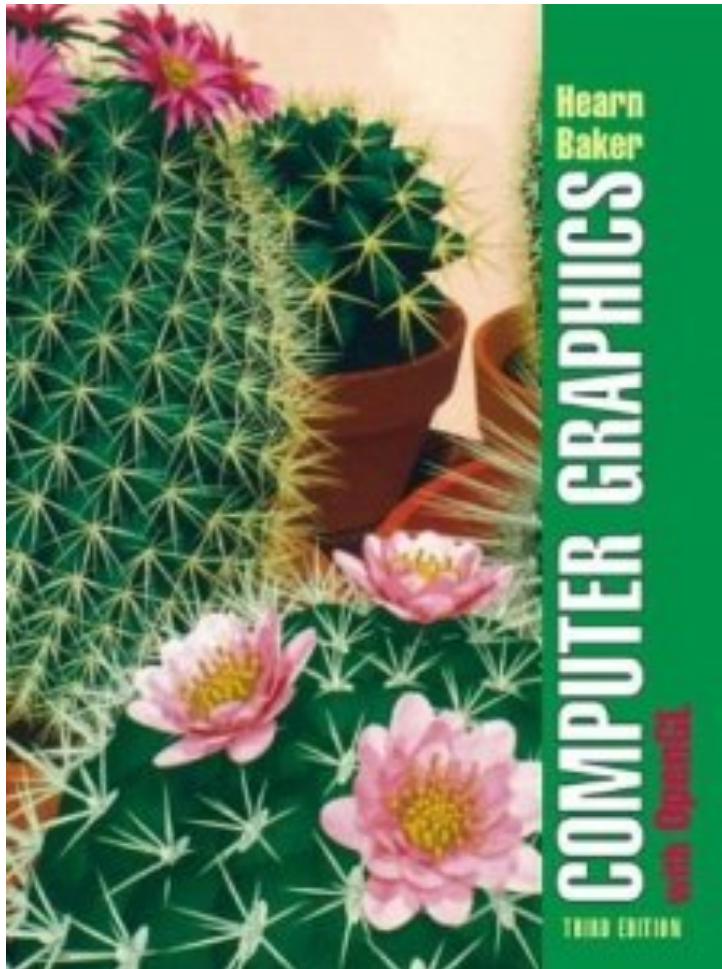


# Course Text

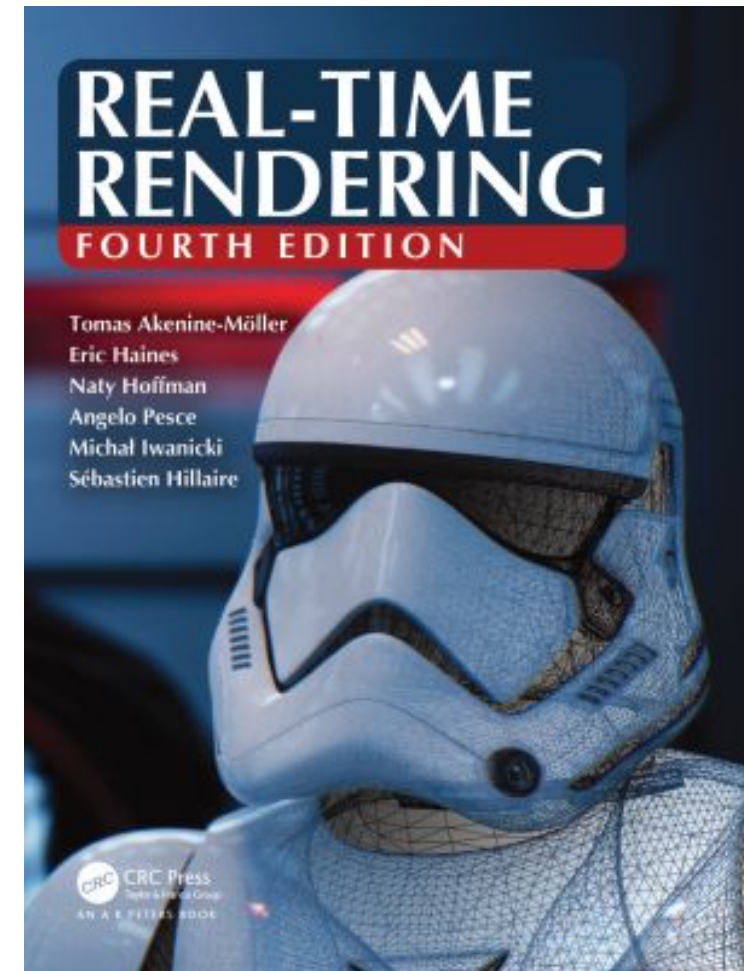
- Computer Graphics with OpenGL, Third Edition D. Hearn, M. P. Baker (电子工业出版社, 中文版)
- Fundamentals of Computer Graphics, Peter Shirley, Steve Marschner, A K Peters
- 计算机图形学——原理、方法及应用, 潘云鹤, 董金祥, 陈德人, 2003
- OpenGL Programming Guide, Fourth Edition, Addison-Wesley, 2003, (OpenGL编程指南, 人民邮电出版社)
- OpenGL Distilled, Paul Martz, Addison-Wesley, Addison-Wesley Professional; IST edition (OpenGL 2.0精髓, 人民邮电出版社)
- <http://nehe.gamedev.net> - The NeHe tutorials



# Textbooks



Computer Graphics with  
OpenGL (4th Edition)



Real-Time Rendering  
(4th Edition)

# 看完Real-time Rendering是一种什么体验?





# 看完Real-time Rendering是一种什么体验?



<https://www.zhihu.com/question/35567285>



# Course Faculty Details

- Instructors:
  - 张宏鑫 zhx@cad.zju.edu.cn
  - 童若锋 trf@zju.edu.cn
  - 吴鸿智 hwu@acm.org
- TA:
  - 董斌智 (19硕), 方雨桐 (18硕)
  - email: [graphicszju@163.com](mailto:graphicszju@163.com)
- Office: 紫金港蒙民伟楼517室
- Tel: 13958011790
- TA hours: PM 02:00-03:00, Monday,



# Evaluation

- 30% : Lab assignments
- 40% : Course Project
- 30% : In-class performance
  - in-class quiz and homework
  - attendance
  - question and answer





# Course Website

- 百度云盘
  - TBD
  - Download courseware
  - Upload homework
    - Name format: NAME\_ID\_number.rar (or .zip)
    - Example: 许星\_30801006\*\*\_2.rar
- WEB
  - <http://give.zju.edu.cn/cgcourse>
  - <http://www.cad.zju.edu.cn/home/zhx/CG/2020>
  - <https://github.com/hongxin/CGCourse-2020>



# More ...

- <https://graphics.stanford.edu/wikis/cs148-10-fall>



Pat Hanrahan

# The main idea

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本源

ultimate source



# Homework today

- Say hello to me and TA in [course.zju.edu.cn](http://course.zju.edu.cn)  
(董斌智 & 方雨桐)
  - include your name, ID, e-mail address
  - one of your frontal face photo
  - your major interests
  - wechat number (optional)
    - not necessary, but recommended, to build a WeChat group
  - even a brief greeting to TA
- It's A0

