推荐使用VSC和VS，其他的文本编辑器或者IDE最好不要选择

What is Computer Graphics?

The use of computers to synthesize and manipulate visual information
注意：计算机图形学和计算机视觉是有区别的

Why study Computer Graphics?

The most important reason
Computer Graphics is AWESOME!!!!!
I love graphics!!!

The following lines are just excuses.

- Applications: Video Games, Movies, Animations, Design, Visualization, VR&AR, Digital Illustration, Simulation, GUI, Typography
  虚拟主播也算是图形学的应用吧🧐？ 然然😭我的然然😭
- Fundamental Intellectual Challenges

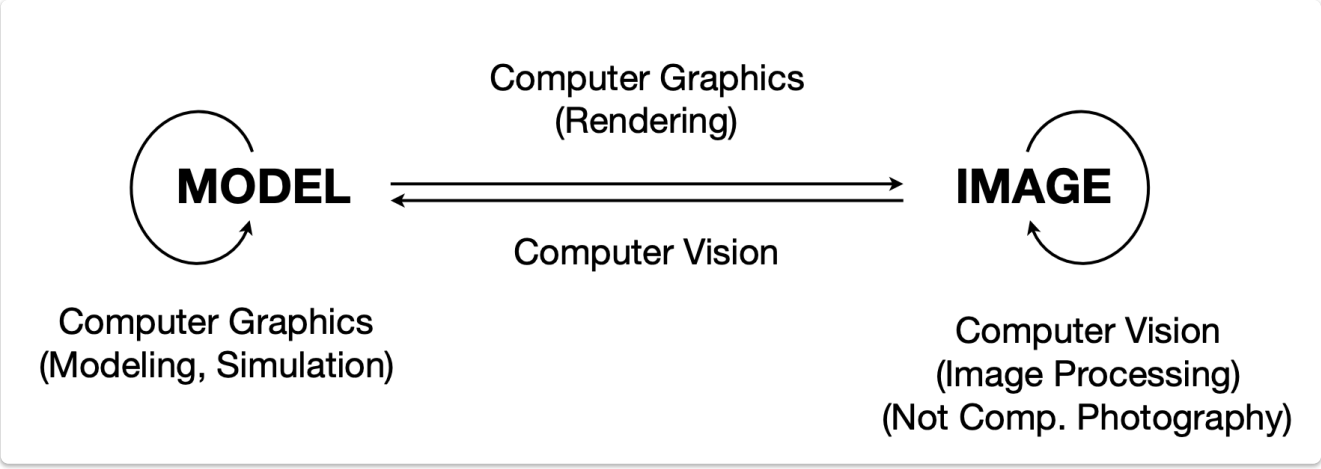
  > - Creates and interacts with realistic virtual world
  > - Requires understanding of all aspects of physical world
  > - New computing methods, displays, technologies
- Technical Challenges

  > - Math of (perspective) projections, curves, surfaces
  > - Physics of lighting and shading
  > - Representing / operating shapes in 3D
  > - Animation / simulation
  > - ~~3D graphics software programming and hardware~~ Again, we are not learning about how to use the APIs.

The difference between Computer Graphics and Computer Vision

(其实没有特定边界（大嘘) 而且二者经常在一起使用，现在也很难区分了

根据教授的理解



大概理解就是计算机图形学是得到一个实在的图片，类似于作画，把手中的笔替换为电脑，把自己在脑中打的稿换成模型。

而计算机视觉是通过观看大量的图片，来得到一个用于预测或者输出的模型。（NVIDIA's face generator，手写笔记识别）凡是涉及到猜测都属于计算机视觉的范畴（因为猜测是深度学习所擅长的领域）