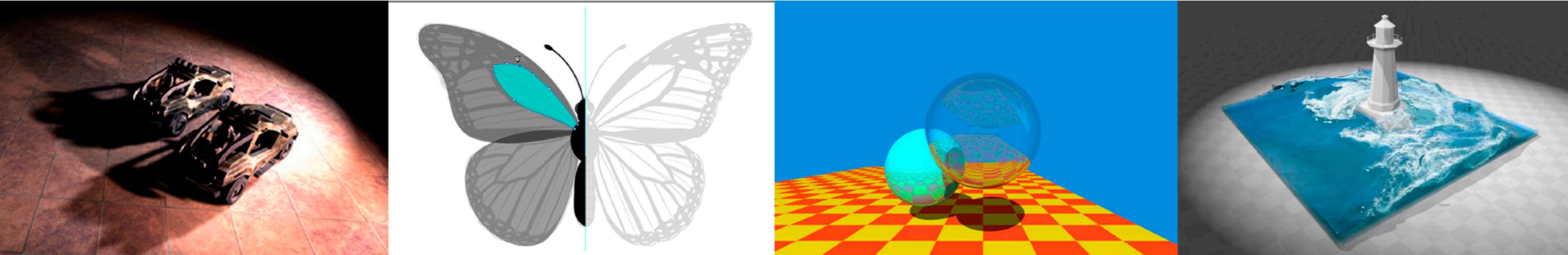


# Introduction to Computer Graphics

GAMES101, Lingqi Yan, UC Santa Barbara

## Lecture 1: Overview of Computer Graphics



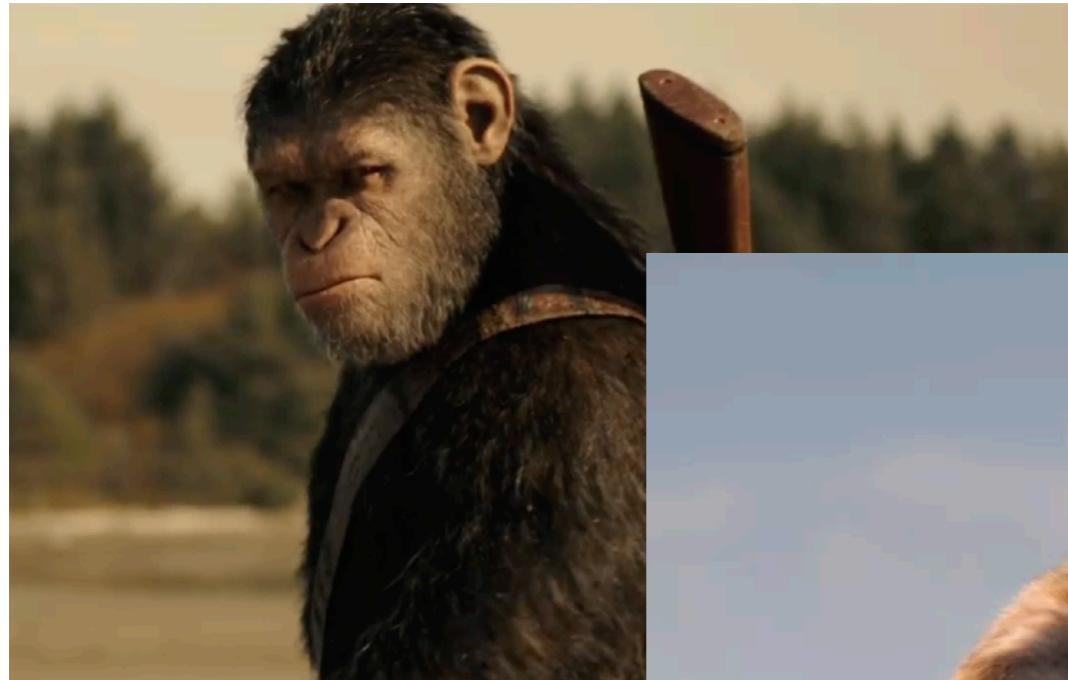
# Welcome!

# Instructor

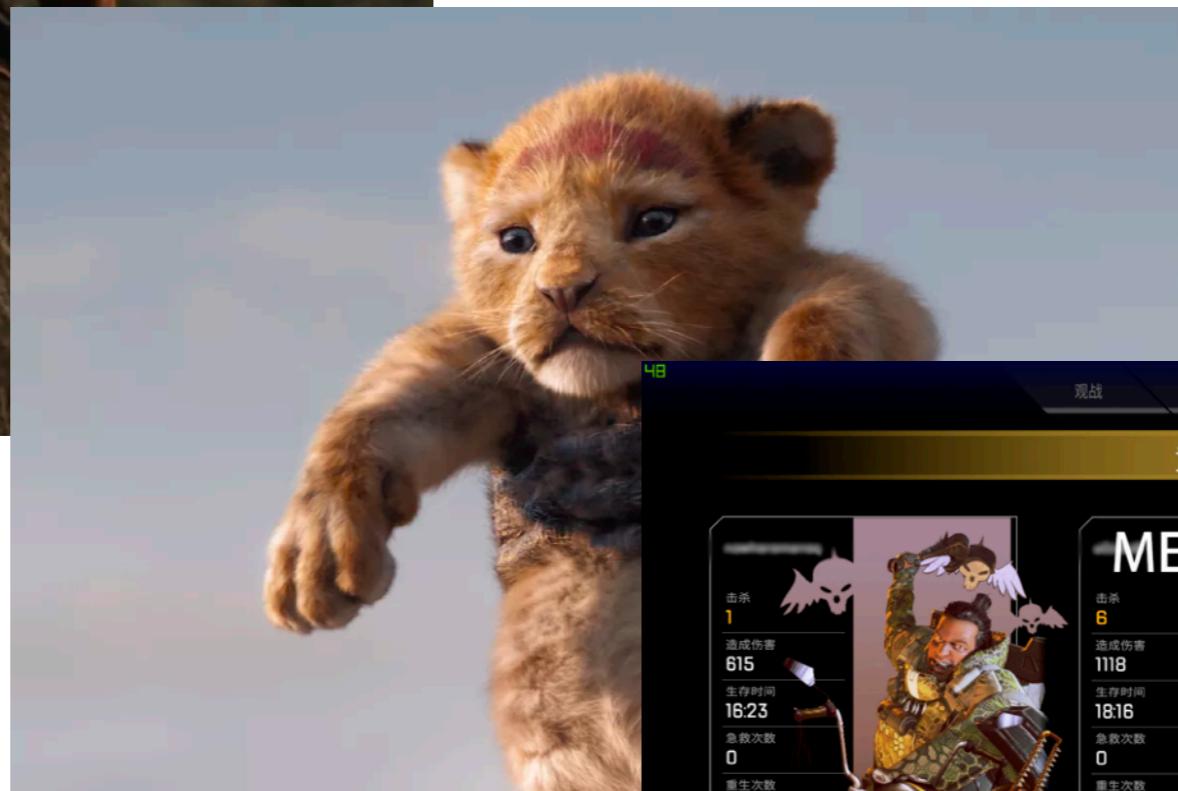
- Lingqi Yan (闫令琪)
  - 2018 - now: Assistant Professor @ UCSB
  - 2013 - 2018: Ph.D @ UC Berkeley
    - 2009 - 2013: B.E. @ Tsinghua University
  - Website: [www.cs.ucsb.edu/~lingqi/](http://www.cs.ucsb.edu/~lingqi/)
  - Research: Rendering in Computer Graphics
  - Hobbies: research, video games, piano, traveling, NBA, etc.



# Instructor's Achievements



2018: Oscar Nominee  
for Best Visual Effects



2019: research 2017  
widely adopted in  
Lion King HD



**2019: six APEX Champions in one evening  
(collaborated with Adobe)**

# Course Staff

- Teaching Assistants
  - 刘光哲 (清华, lgz17@mails.tsinghua.edu.cn)
  - 史雨宸 (中科大, syc0412@mail.ustc.edu.cn)
  - 邓俊辰 (哈工大, 1050106988@qq.com)
- More will be recruited soon after this lecture  
(based on need)

# Today's Topics

- What is Computer Graphics?
- Why study Computer Graphics?
- Course Topics
- Course Logistics
- Linear Algebra Review

# What is Computer Graphics?

**com•put•er graph•ics** /kəm'pyōodər 'grafiks/ n.

The use of computers to synthesize and manipulate visual information.

# Today's Topics

- What is Computer Graphics?
- Why study Computer Graphics?
  - Applications
  - Fundamental Intellectual Challenges
  - Technical Challenges
- Course Topics
- Course Logistics

# Video Games



Sekiro: Shadows Die twice (2019 Game of the Year)

# Video Games



Borderlands 3 (2019)