

CSC 240

Computer Graphics

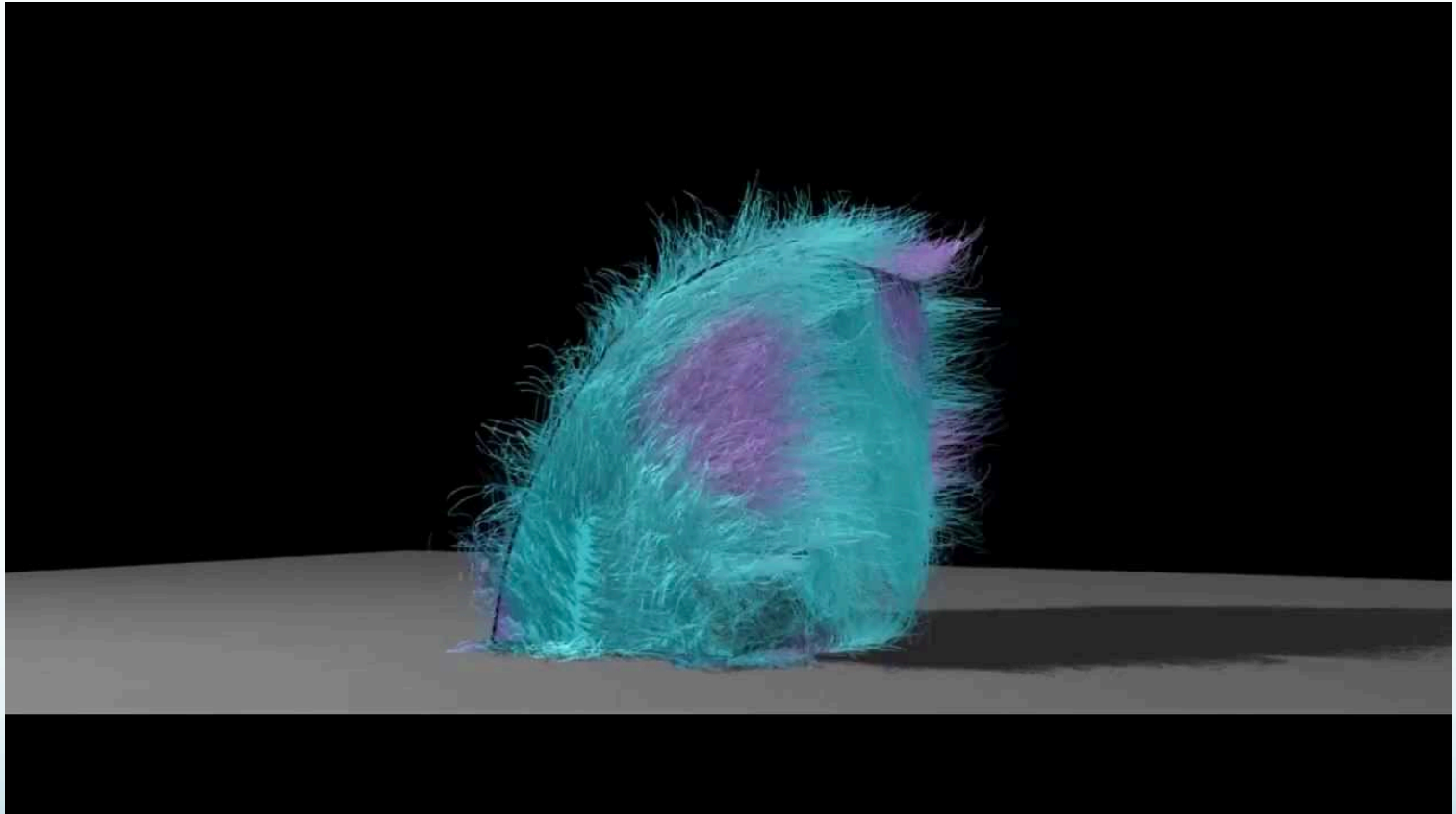
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Fall 2016
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Outline: 12/14

- Animation (recent advances)
- Final Review (pick up two handouts)
- After class: resume office hours from yesterday
 - **Final Project**: due Thurs Dec 15
 - **Final is self-scheduled**
 - **Office Hours**: can come: Thurs 4-5pm (390 priority)
Monday only next week

Animation (recent advances)

Monster's Inc (2001)



Maya Fur test - Sully - Monster Inc

<https://www.youtube.com/watch?v=fCtrlCTctNs>

Self-shadowing



(a)



(b)

Brave (2012)



<https://www.youtube.com/watch?v=Cecx5HVtUDY>

0:00

Disney Rendering Software

Hyperion



<https://www.disneyanimation.com/technology/innovations/hyperion>

Zootopia (2016)



<https://www.youtube.com/watch?v=zaqmn55w4IA>

0:48

Frozen (2013)



<https://www.youtube.com/watch?v=YpuaZY1LPGA>

0:00

How to Train your Dragon (2010)

Making of the film (1.5 hrs)

<https://www.youtube.com/watch?v=hPCNc0wFvrA&feature=youtu.be>

Clip that shows lighting:

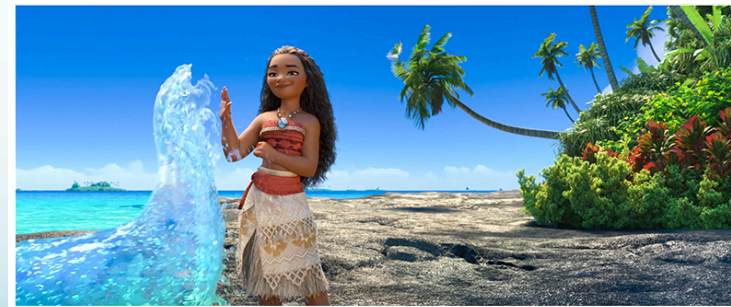
<https://www.youtube.com/watch?v=Xht4U5Z9HH4>



Moana (2016)



- Particle model for water (like the Frozen model for snow)
- Use of distributed computing for efficiency



<https://youtu.be/S-HG8IA-2TI>

Credit: <https://redshift.autodesk.com/moana-animation/>

Moving away from pure CG

Lord of the Rings



Benedict Cumberbatch
as Smaug

[Video](#)



Paperman (2016)

- Combines CG and 2D (drawn) images



<https://www.youtube.com/watch?v=TZJLtujW6FY>

0:00

Python in Computer Graphics

[More information about how Python is used for CG](#)

