

VR/AR Capstone

The World's Most Epic VR/AR Capstone

Logistics

Lecture: Tue 10:30 - 11:50am

- THO 101 - lecture
- THO 119 - optional update from us

Lab: Wed 1:30 - 5:20pm

- SIEG 326 / 327

Website:

<http://courses.cs.washington.edu/vrcapstone>

What are we going to do?

- You will invent and develop an Augmented Reality application in 10 weeks
- Hear and Learn from the Biggest Minds in Virtual and Augmented Reality
- Among the first people in the world to develop apps for HoloLenses



Holoportation

holoportation

<http://research.microsoft.com/holoportation>

Interactive 3D Technologies

<http://research.microsoft.com/groups/i3d>

Microsoft Research

How are we going to do that?

This class is very different from a traditional class.

We will simulate what a job in the software industry is like.

Similar to Google, Facebook, startups...

teams of 4

kickstarter style webpage

project pitch and PRD (project requirements document)

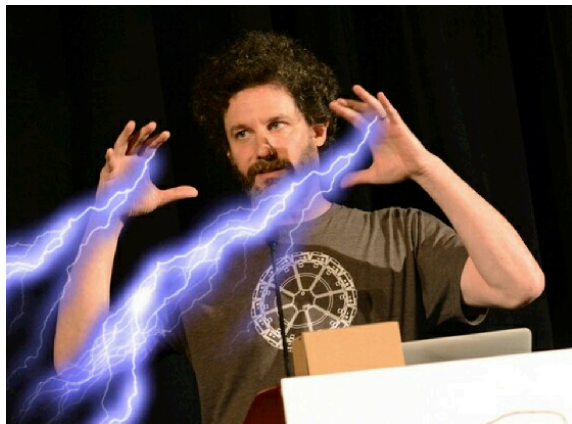
weekly updates

peer reviews

demos

have fun!

About us



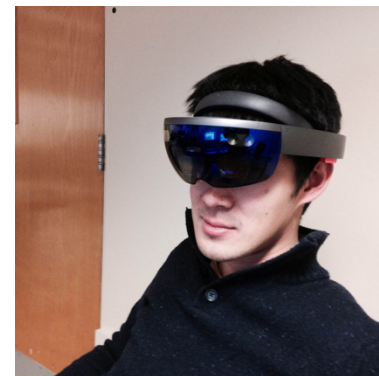
Steve



Ira



Aditya



Supasorn



Alain



Andrew

Dedicated AR/VR Lab (we'll go there tomorrow)



Field Trip: Holographic Academy (Wed 4/13)



<https://dev.windows.com/en-US/holographic/academy>

Creating 3D content / Holograms

3D models on the web

Budget to buy 3D models

Scanner in
the lab



Field Trip: Microsoft Production Studios (Wed 4/27)



<http://research.microsoft.com/en-us/um/redmond/projects/fvv/>



VR Room



HTC VIVE



Oculus DK2



Game engine which we will use to develop

Unity tutorial **tomorrow** by Nathan Martz (Google)

bring laptop and download <https://goo.gl/6B3VDD>

We will use a special HoloLens Unity build

Speakers

<https://courses.cs.washington.edu/courses/cse481v/16sp/speakers.php>

Nick Whiting, Technical Director, VR & AR, Epic Games

Brian Murphy, Creative Director, Microsoft XBOX

Ashraf Michail, Partner Software Architect - Microsoft

Clay Bavor, VP VR, Google

Steve Sullivan, Partner Architect, Microsoft

Michael Abrash, Chief Scientist, Oculus

Michael Gourlay, Microsoft

Tiltbrush, Google

Neal Stephenson, Author and Chief Futurist, Magic Leap

Tell us about you, use handout

Your name

Year

Phd / Master / Undergrad

Computer Graphics (class? Other experience?)

Computer Vision (class? Other experience?)

Unity experience - do you know unity?

Application interests (Games/Health/Education/etc.)

Preferred partners

Non-partners (email instructors)

Next steps:

Teams:

We will announce teams tonight

Meet with your team

Brainstorm project - start coming up with ideas today [projects ideas](#)

Next steps:

[Kickstarter](#) style webpage - due next Tue (4/5)

Make an elevator pitch (as a video) that will sell your idea!

Document everything throughout your project (videos, photos...)

Next steps:

Project pitch meeting with staff - next Wed (4/6)

10 min in person pitch + 10 min for feedback from us (+ MSFT HoloLens team rep.)

Written project proposal - due Fri (4/8)

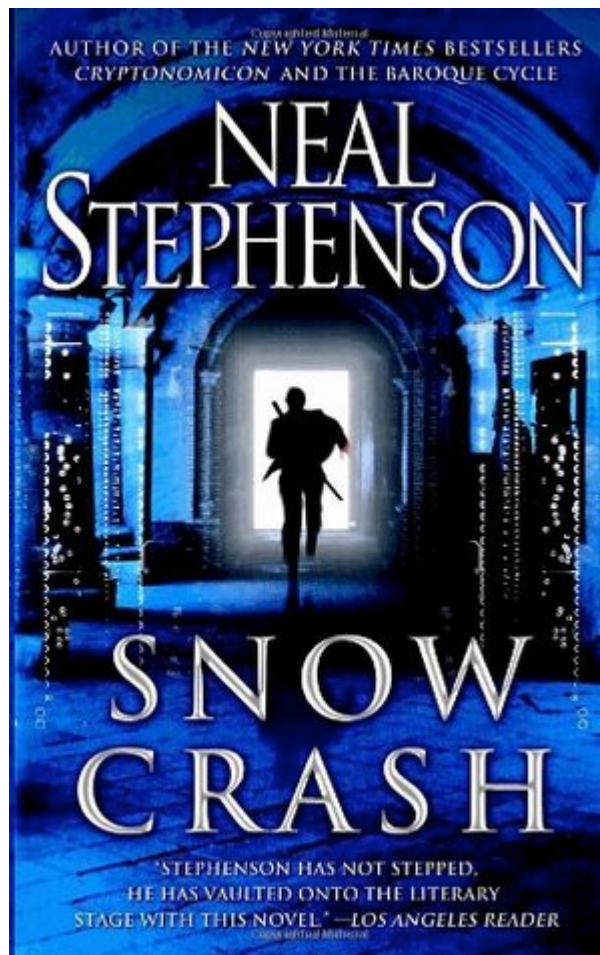
On your webpage

Project Requirements Document (PRD) - due Thursday (4/14)

Contract of what you will deliver and graded against

Template and instructions: <https://goo.gl/ahpVd5>

Assigned Reading



Questions?

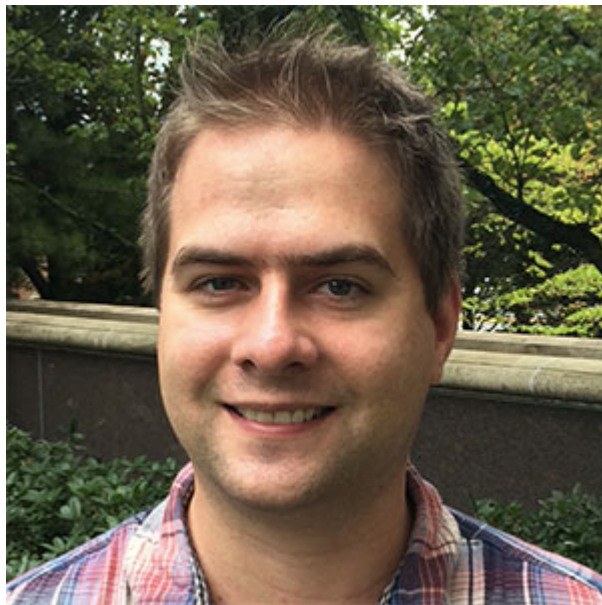
Let's start

Class is filmed in VR (!) and videos will be uploaded to YouTube

Let's start

Nick Whiting (Technical Director, Epic Games)

The Making of Bullet Train



Overload info

Overload Request Link: <http://tinyurl.com/cseoverload>

Code word is: “Giraffe”