

# Advanced Graphics and Interaction 2015: Lecture 6



Agi15 students preparing Hello World! demo

Mario Romero  
2015/09/14



**VICSTHLM**  
VISUALISATION INTERACTION COLLABORATION

# AGI15 Calendar: [link](#)

- Mon 31 aug 15:00-17:00
  - Tue 1 sep 13:00-17:00
  - Mon 7 sep 15:00-17:00
  - Thu 10 sep 10:00-12:00
  - **Mon 14 sep 15:00-17:00**
  - Thu 17 sep 10:00-12:00
  - Tue 22 sep 10:00-12:00
  - Fri 25 sep 8:00-16:00
  - Mon 28 sep 15:00-17:00
  - Mon 5 oct 15:00-17:00
  - Mon 12 oct 15:00-17:00
  - Fri 30 oct 9:00 – Sun 1 Nov 16:00
  - Mon 2 nov 15:00-17:00
  - Tue 3 nov 13:00-17:00
  - Tue 10 nov 10:00-12:00
  - Tue 17 nov 10:00-12:00
  - Tue 24 nov 10:00-12:00
  - Tue 1 dec 10:00-12:00
  - Fri 4 dec 15:00-19:00
- Lecture 1 – [Introduction](#)
  - Lecture 2-3: [Forming Groups and Brainstorming](#)
  - Lecture 4: [Proposals](#)
  - Lecture 5: [Discussion based on Proposals](#)
  - Lecture 6: [Hello World Demos](#)
  - Lecture 7: [Discussion based on the Hello World Demos](#)
  - Lecture 8: [Preparing ForskarFredag 2015](#)
  - [ForskarFredag](#)
  - Lecture 9: [Reflecting on ForskarFredag](#)
  - Lecture 10: [Agile Development 1 towards Comic Con - Gamex 2015](#)
  - Lecture 11: [Agile Development 2 towards Comic Con - Gamex 2015](#)
  - [Comic Con Gamex](#)
  - Lecture 12: [Reflecting on Comic Con Gamex](#)
  - Lecture 13-14: [Forming new groups and brainstorming project 2](#)
  - Lecture 15: [Proposals Project 2](#)
  - Lecture 16: [Hello World Demos for Project 2](#)
  - Lecture 17: [Agile Development 1 for Open House](#)
  - Lecture 18: [Agile Development 2 for Open House](#)
  - [VIC AGI15 Open House](#)

# Padawan 101



# Padawan 101

- Done
  - Models
    - Light saber
    - Sphere
  - Wii signal
  - Volumetric shaders
- Going to do
  - Interaction wall
  - Audience visual
  - FX
- Not doing
  - Blind fold



# Shmoonig



# Shmoonig

- Done
  - Explored
    - Leap Motion
  - Wii mote control
  - Interactive (rough) graphics
- Going to do
  - Game play
  - Models for aliens
  - FX
  - Explore
    - Kalman Filtering
- Octree Rending
- Moiré Patterns
- Anti-Aliasing
- Bump Mapping
- Register and coordinate hands and eyes
- Scott Saponas' air guitar hero (?)
- Not doing
  - Leap Motion
  - ?

# MadSand





# MadSand

Live demo





# MadSand

- Done
  - Wooden Structure prototype
  - Kinect tracking
  - Simple graphics
  - Simple interaction
- Going to do
  - \*Simple\* game mechanics
  - Sand
  - Hidden objects
  - Explore
    - Haptics for hidden objects
- Projecting on non-flat surfaces (image warping)
- Phong illumination
- Bump mapping
- Octree rendering
- Anti-aliasing
- Projection
- Not doing
  - ?

# Multiplayer AR game



# . Multiplayer AR game

- Done
  - Wireless Client/Server
  - Simple graphics
  - Simple image registration
  - Multi-perspective AR
  - Vuforia
  - Simple physics
- Going to do
  - Audience view
- Game play
- Registration consistency
- Filtering and smoothing
- Explore social dimensions of AR in context (bar, etc).
- Not doing
  - Table top interaction



# Teamtris



# Teamtris

- Done
  - Tetris
  - Trees
- Going to do
  - Sound
  - Explore
    - Removing trees
    - Make it unlike tetris
- 3D building
- Multiview 3D puzzle
- Limited rotations and translations to view plane
- Not doing
  - Constructive Geometry

# Blooper





# Blooper

- Done
  - Kinect
  - sockets
- Going to do
  - Explore computing centroid of a blob
- Not doing
  - No multi cam



Thank you!  
Questions

[marior@kth.se](mailto:marior@kth.se)