Feedback on Hello World Demos and Preparing for ForskarFredag - Lecture 8

Mario Romero
2016/09/20

KTH VETENSKAP OCH KONST

VICSTHLM
VISUALISATION INTERACTION COLLABORATION

AGI16 Calendar: link

• Tue 30 aug 13:00-15:00	Lecture 1: Introduction
• Fri 2 sep 8:00 – 12:00	Lecture 2-3: Forming Groups and Brainstorming
• Tue 6 sep 13:00 – 15:00	Lecture 4: Groups formed, inspiration, and brainstorming
• Fri 9 sep 8:00 – 10:00	Lecture 5: Proposals
• Tue 13 sep 13:00 – 15:00	Lecture 6: Proposal Feedback
• Fri 16 sep 10:00-12:00	Lecture 7: Hello World Demos
• **Tue 20 sep 13:00 – 15:00**	**Lecture 8: Preparing ForskarFredag 2016**
• Tue 27 sep 13:00 – 17:00	Lecture 9: Demo and preparation towards ForskarFredag
• **Fri 30 sep 8:00 – 16:00**	**ForskarFredag (we set up on Thursday evening)**
• Tue 4 oct 13:00 – 15:00	Lecture 10: Reflecting on ForskarFredag
• Tue 11 oct 13:00 – 15:00	Lecture 11: Preparing for Comic Con
• Tue 1 nov 13:00 – 15:00	Lecture 12: Preparing for Comic Con
• **Fri 4 nov 9:00 – Sun 6 Nov 16:00**	**Comic Con (we set up on Thursday evening)**
• Tue 15 nov 13:00 – 15:00	Lecture 13: Forming groups for project 2
• Fri 18 nov 8:00-12:00	Lecture 14-15: Proposals Project 2
• Tue 22 nov 13:00-15:00	Lecture 16: Hello World Demo Project 2
• Tue 29 nov 13:00-15:00	Lecture 17: Feedback on Demos
• Tue 6 dec 13:00-15:00	Lecture 18: Preparing for Open House
• Tue 13 dec 13:00-15:00	Lecture 19: Demo project 2
• **Fri 16 dec 15:00-19:00**	**VIC AGI16 Open House**

Agenda

1. Feedback
    1. Hoverbroom
    2. Pockemon Don’t Go
    3. TowPow
    4. Chosen Ones
    5. Zield
    6. SounDark
    7. CocAR
    8. Have Mercy
    9. URGOD
    10. Pointy Stick
2. User study announcement
3. Preparing ForskarFredag
4. Demos next Tuesday
5. Assignment 3
6. Grades so far
7. Individual meetings if needed

Hoverbroom

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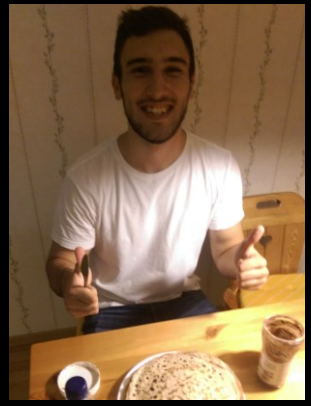
Hello World Demo
Feedback Hoverbroom

- The positive
  - Skilled interaction is working
  - Game mechanics are interesting
- The challenge
  - Beginner's interaction
    - Pitch and Yaw are dampened
  - Graphics
  - FX
  - Sound
  - Super user interaction
    - Rolls
    - Movement vs. Gaze

Proposal for “Pokemon DON’T-GO”



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Hello World Demo
Feedback PDG

- The positive
  - Environment on its way
- The challenge
  - HW
    - sensor tags
  - Plans B and C
  - Don’t use copyrighted material
  - Build your own models and animations
  - Physical setup

Proposal for TowPow





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Hello World Demo
Feedback TowPow

- The positive
  - Vive is working
  - Pixelsense receives input
  - Some game mechanics
  - Picking up and shooting nice
- The challenge
  - Use two controllers
    - Bow and arrow
    - Shield and sword
    - Rifle?
  - Graphics
  - Pixelsense output

Proposal for The Chosen Ones

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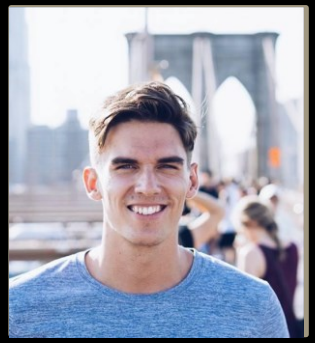

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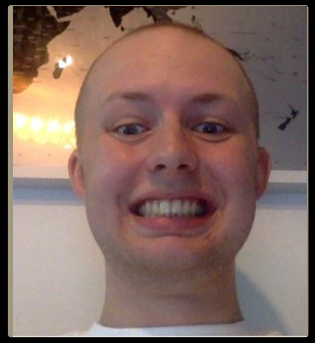

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Hello World Demo
Feedback The Chosen Ones

- The positive
  - Vive working
  - Kinect mostly working!
  - Bullets in the air
- The challenge
  - Kinect body stable
    - Can you use Vive to anchor hands
  - Balance game
  - Explore speed
  - Graphics

Proposal for Zield

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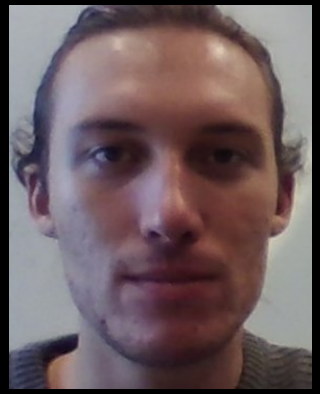
Hello World Demo
Feedback Zield

- The positive
  - HTC working
- The challenge
  - UX
  - Game play
  - Graphics
  - goal

Proposal for **SOUNDARK**

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Hello World Demo
Feedback SounDark

- The positive
  - Oculus working
  - Sound working
  - Shader working
  - Procedural maze working
- The challenge
  - Sound filtering
  - Intetional sound design
  - Gameplay
  - Graphics
  - Balance
  - View for audience
  - Design audience participation

Proposal for CocAR

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Hello World Demo
Feedback CocAR

- The positive
  - Pixel sense working
  - Controller working
- The challenge
  - VR?
  - Physics
  - Graphics
  - FX
  - Game play
  - Balance
  - 3D print and fiducials

Proposal for Have Mercy





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Hello World Demo
Feedback Have Mercy

- The positive
  - Environment set up
  - Phone sort of working
- The challenge
  - VR?
  - Connectivity
  - Game play
  - Balance
  - Abilities
  - Graphics
  - FX

Proposal for You are God

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Hello World Demo
Feedback You are God

- The positive
  - Vive working very well
  - Physics
  - AI
- The challenge
  - Graphics
  - FX
  - Gameplay
  - Goal
  - Balance

Proposal for Pointy Stick

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Hello World Demo
Feedback Pointy Stick

- The positive
  - Environment started
- The challenge
  - Controller
  - VR?
  - Gestures
    - Definition
    - Recognition
    - Read: Ashbrook, Daniel, and Thad Starner. "MAGIC: a motion gesture design tool." In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pp. 2159-2168. ACM, 2010. PDF

Event for AGI16 · Hosted by Mario Romero

Invite | Edit | •••

October 24 – October 28
Oct 24 at 9 AM to Oct 28 at 7 PM

Visualization Studio VIC
Level 4, room 4451, Lindstedtsvägen 5, 114 28 Stockholm, Sweden
Show Map

Terese Nothnagel, Mario's master student, is working with Volvo research to create an augmented reality analysis tool for automotive engineering. She has developed a first-person 3D visualization of the Volvo XC-90 going through a simulated fluid. The engineering task is to determine contamination events, moments in which the mud strikes the eninge and the distribution belt. We are recruiting 3 to 5 participants for a pilot and 20 participants for the one-hour study during the third and fourth weeks of October. For the first 25 people to sign up, we will award credit equivalent for one assignment, that is you replace one of the AGI16 assignments with participation in the study. Participation will take 60 minutes. Please ask Terese any questions.

Terese, Emilio and 7 other friends are going

16	2	48
going	maybe	invited

Message Guests

INVITE MEMBERS

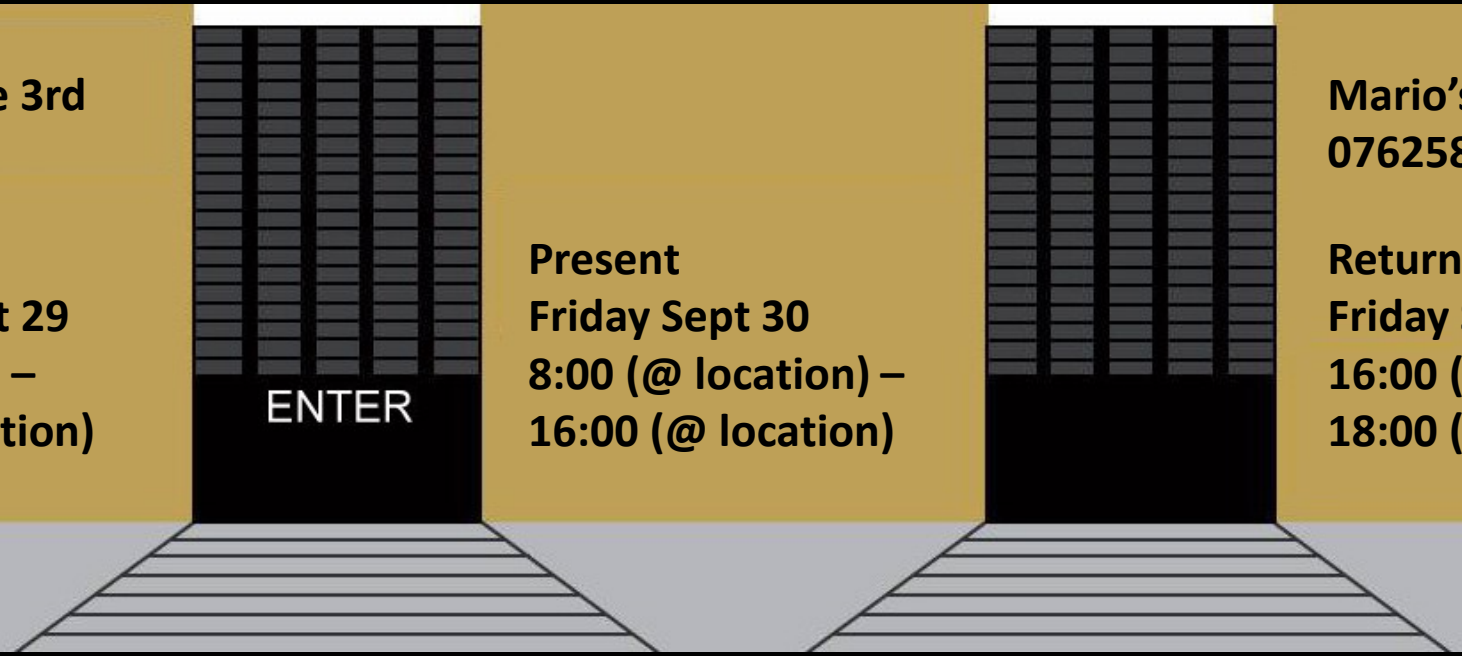
+ Add members to this event

FORSKARFREDAG

En del av europeiska Researchers' Night

We are on the 3rd floor stage

Setup
Thursday Sept 29
15:00 (@ VIC) –
20:00 (@ location)



Present
Friday Sept 30
8:00 (@ location) –
16:00 (@ location)

Mario's mobile
0762581802

Return
Friday Sept 30
16:00 (@ location) –
18:00 (@ VIC)

Event for AGI16 · Hosted by Mario Romero

Invite | Edit | •••

Thursday, September 29 at 3 PM - 8 PM
Next Week · 7–16° Rain Showers

Medborgarplatsen, SE-118 26 Stockholm, Sverige Show Map

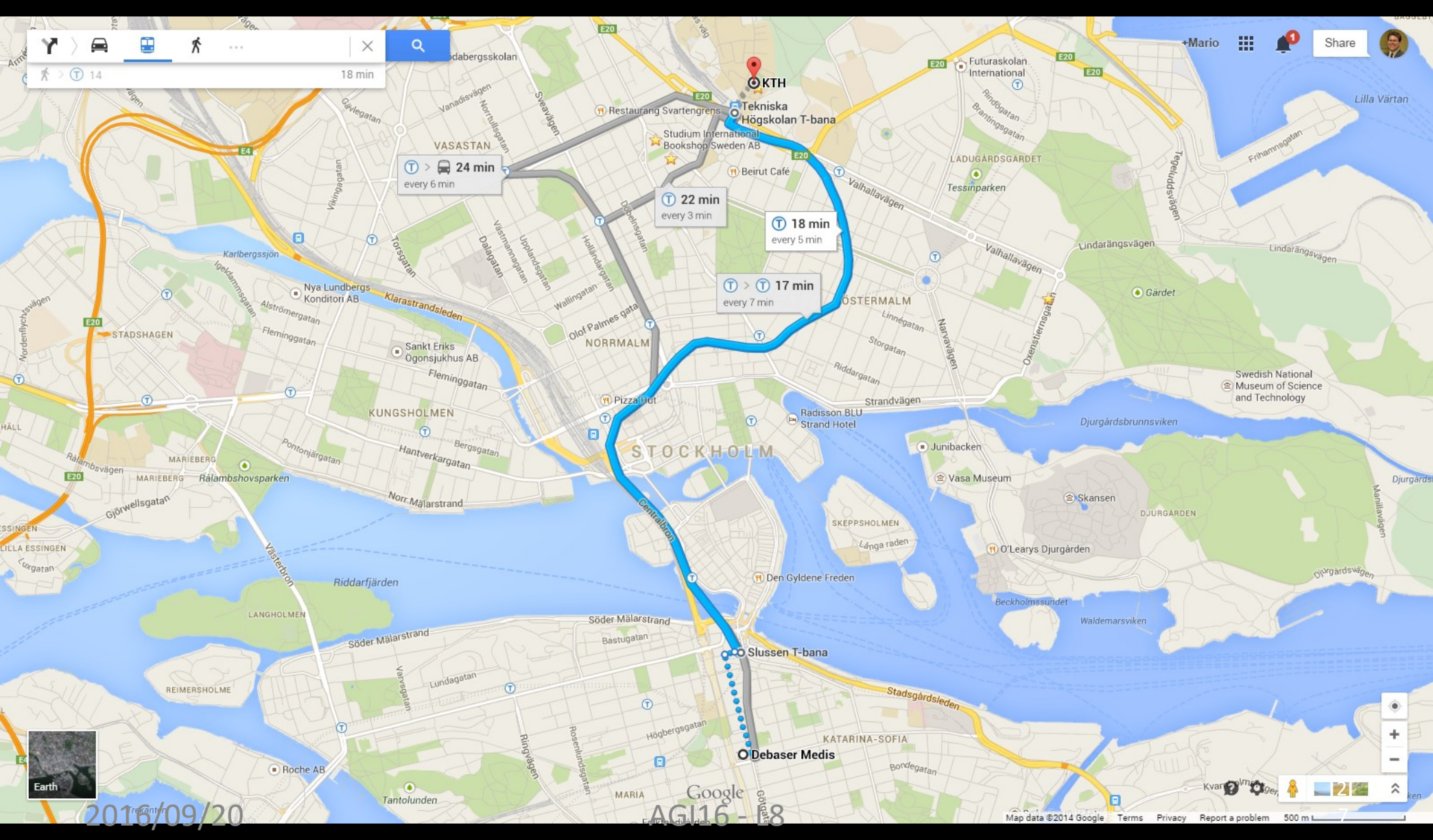
We set up all the demoes for our wonderful projects to wow the high school students and teachers attending ForskarFredag. All groups must have at least two representatives who handle the installation.

Write Post | Add Photo / Video | Create Poll

Alan, Adrian and 17 other friends are going

40	0	22
going	maybe	invited

Message Guests



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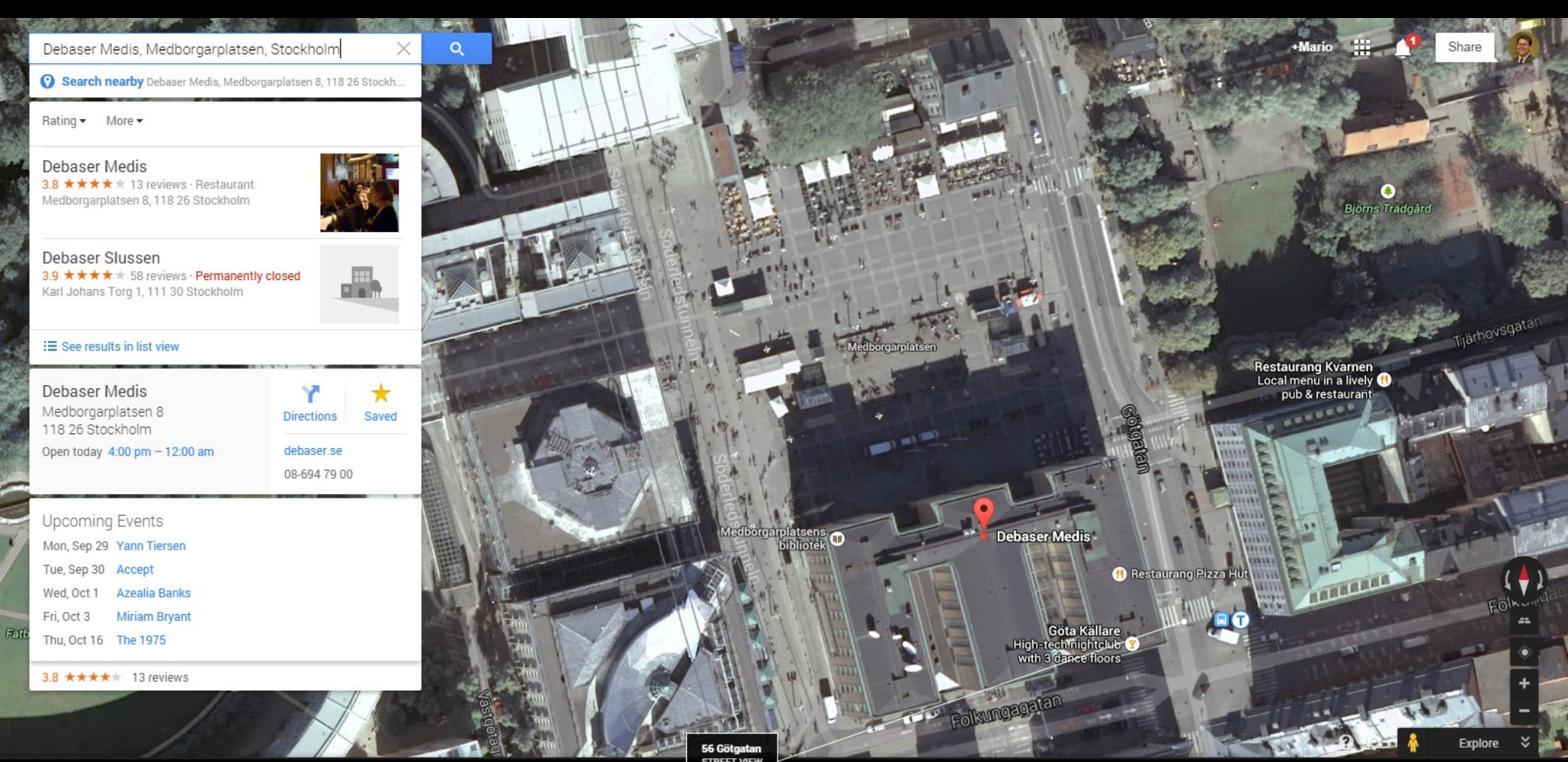
AGI16 - 18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Rating
More
Debaser Medis
3.8 ★★★★☆ 13 reviews · Restaurant
Medborgarplatsen 8, 118 26 Stockholm
Debaser Slussen
3.9 ★★★★☆ 58 reviews · Permanently closed
Karl Johans Torg 1, 111 30 Stockholm
See results in list view
Debaser Medis
Medborgarplatsen 8
118 26 Stockholm
Open today 4:00 pm – 12:00 am
Directions
Saved
debaser.se
08-694 79 00
Upcoming Events
Mon, Sep 29 Yann Tiersen
Tue, Sep 30 Accept
Wed, Oct 1 Azealia Banks
Fri, Oct 3 Miriam Bryant
Thu, Oct 16 The 1975
3.8 ★★★★☆ 13 reviews
+Mario
Share
Björns Trädgård
Medborgarplatsen
Restaurang Kvarnen
Local menu in a lively pub & restaurant
Tjärhovsgatan
Götgatan
Söderleds tunneln
Medborgarplatsens bibliotek
Debaser Medis
Restaurang Pizza Hut
Göta Källare
High-tech nightclub with 3 dance floors
Folkungagatan
Explore
56 Götgatan
STREET VIEW
Map
54 Götgatan
Företagarföreningen Söderhalla...
56 Götgatan
Flying over Södermalm
48 Götgatan
Stockholms Moské
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Medborgarplatsen T-bana
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Östgötagatan
Bergsgatan
Folkbiblioteket
Simhall
Sensus
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Debaser 3rd floor stage

Debaser 3rd floor stage

ForskarFredag 2012


KTH
KEMIVETENS


Solar Sense


Mattecoach
KTH

ForskarFredag

ForskarFredag 2014

ForskarFredag 2014

ForskarFredag 2014

ForskarFredag 2015


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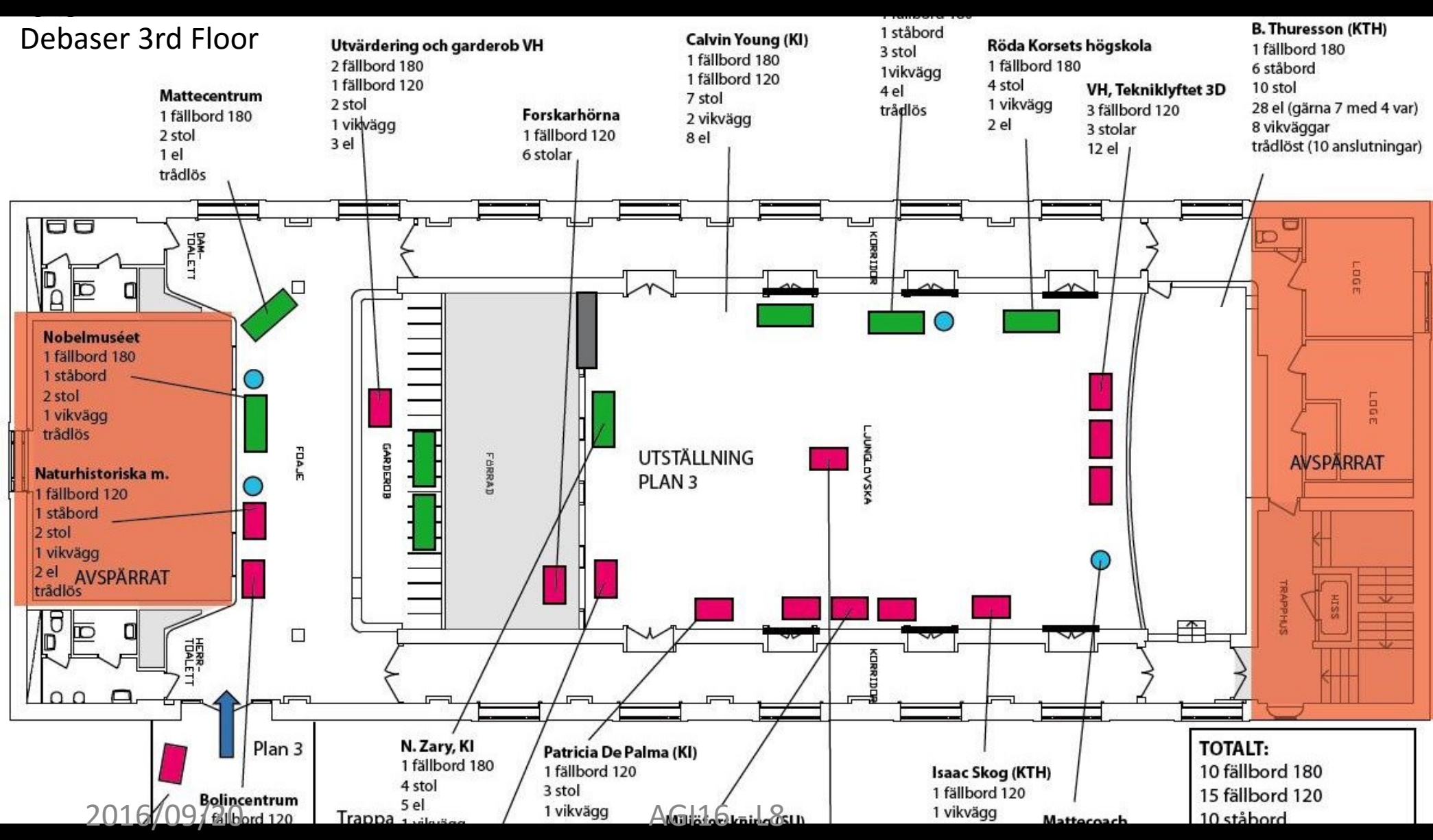
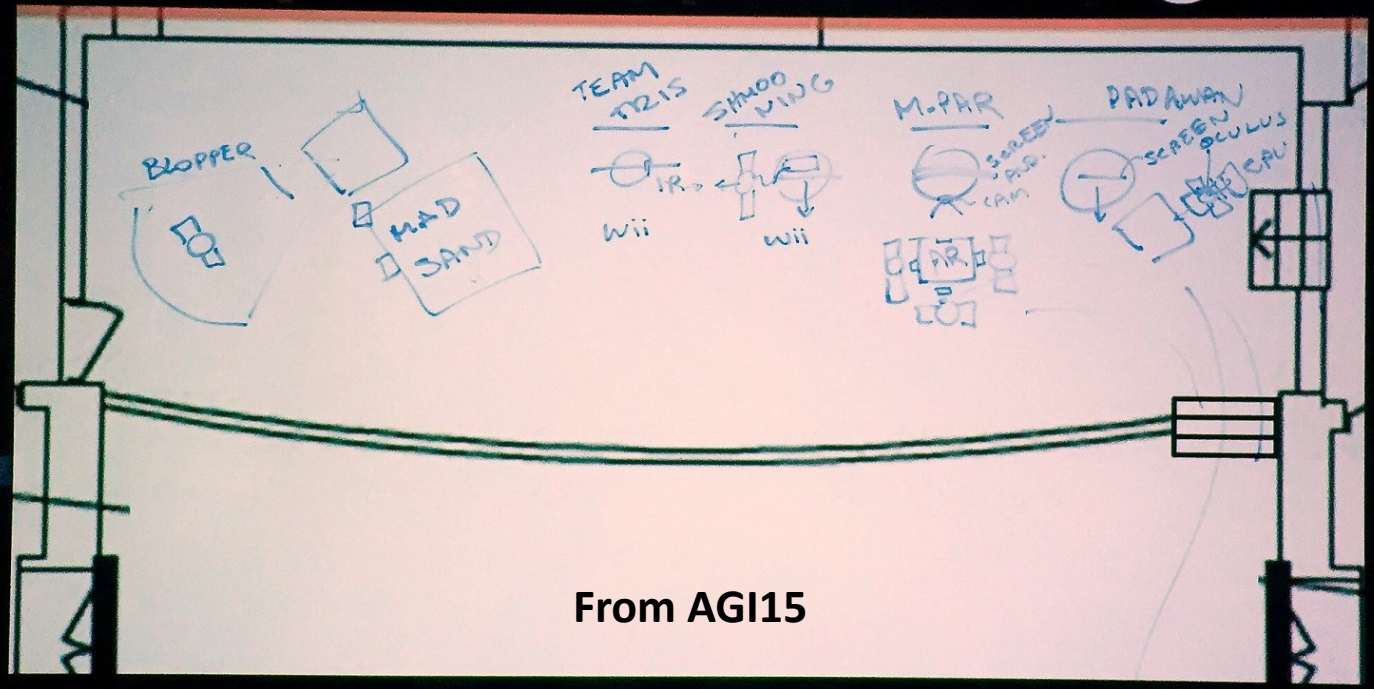
Debaser 3rd Floor



Debaser 3rd floor stage



From AGI15

Teamtris
1 STANDING TABLE
1 BIG! SCREEN
1 POSTER BOARD
2 Wii

Shmooning
1 STANDING TABLES
1 DESKTOP
1 SCREEN
OCULUS + Wii

Blooper
2 POSTER BOARDS
SHARE TABLE
SPACE
KINECT

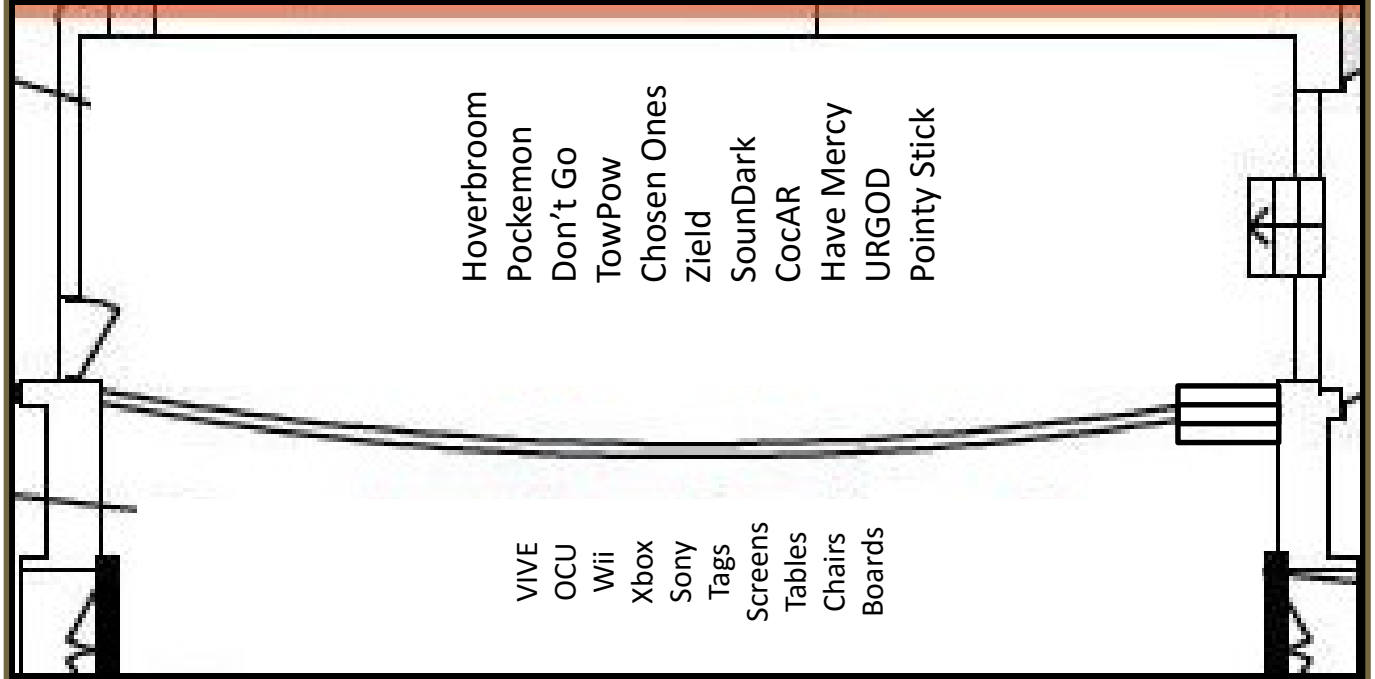
MadSand
2 TABLES (SIT / STAND)
BOARD
(DARKNESS)
PROJECTOR
KINECT

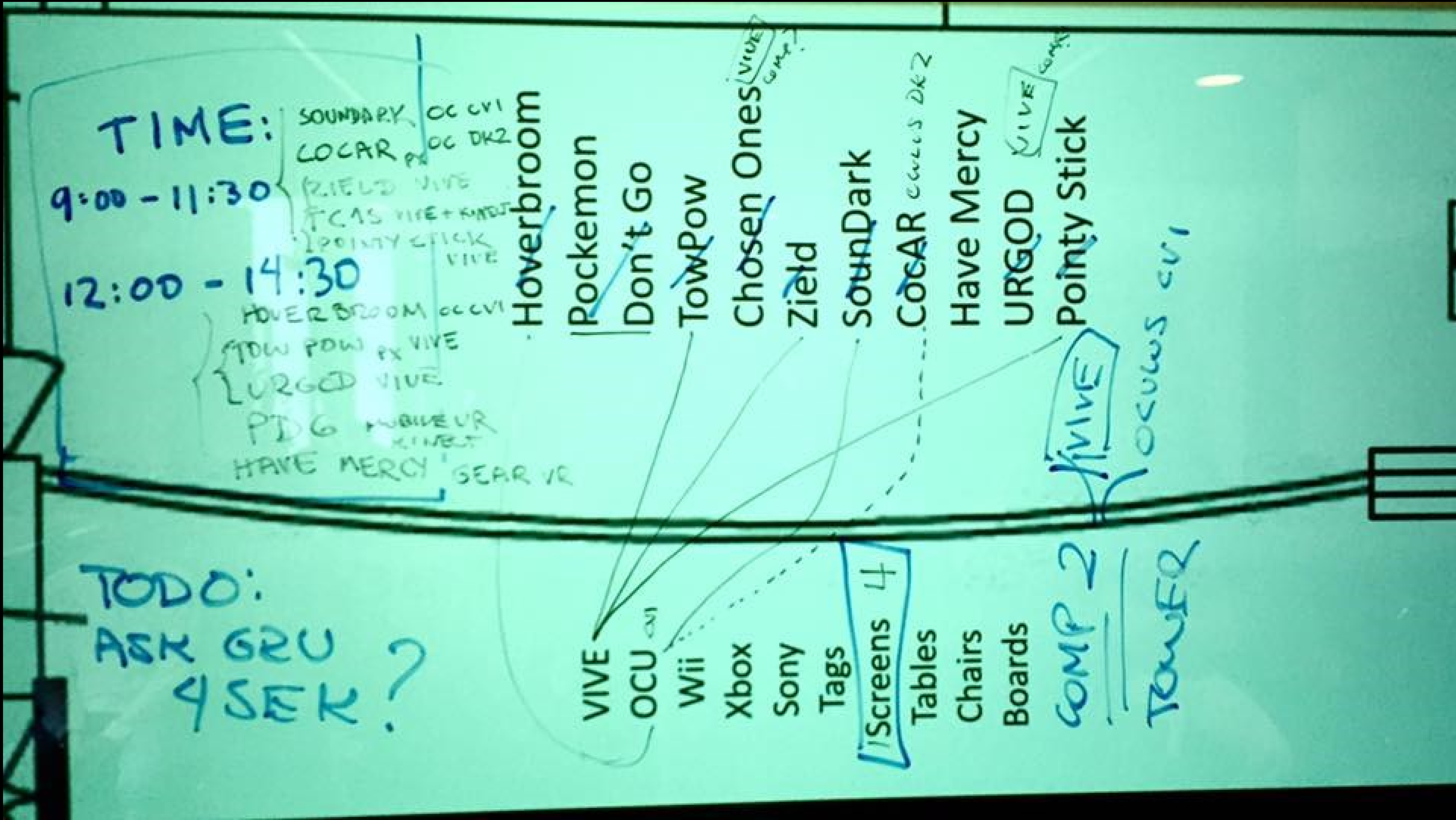
M-PAR
1 STANDING
1 SIT
PAR-IE
WEB CAM
BIG SCREEN

Padawan
OCULUS Wii
1 STAND
1 SIT
TABLE
CHAIR
IR
BIG SCREEN
MAT CUSHIONS

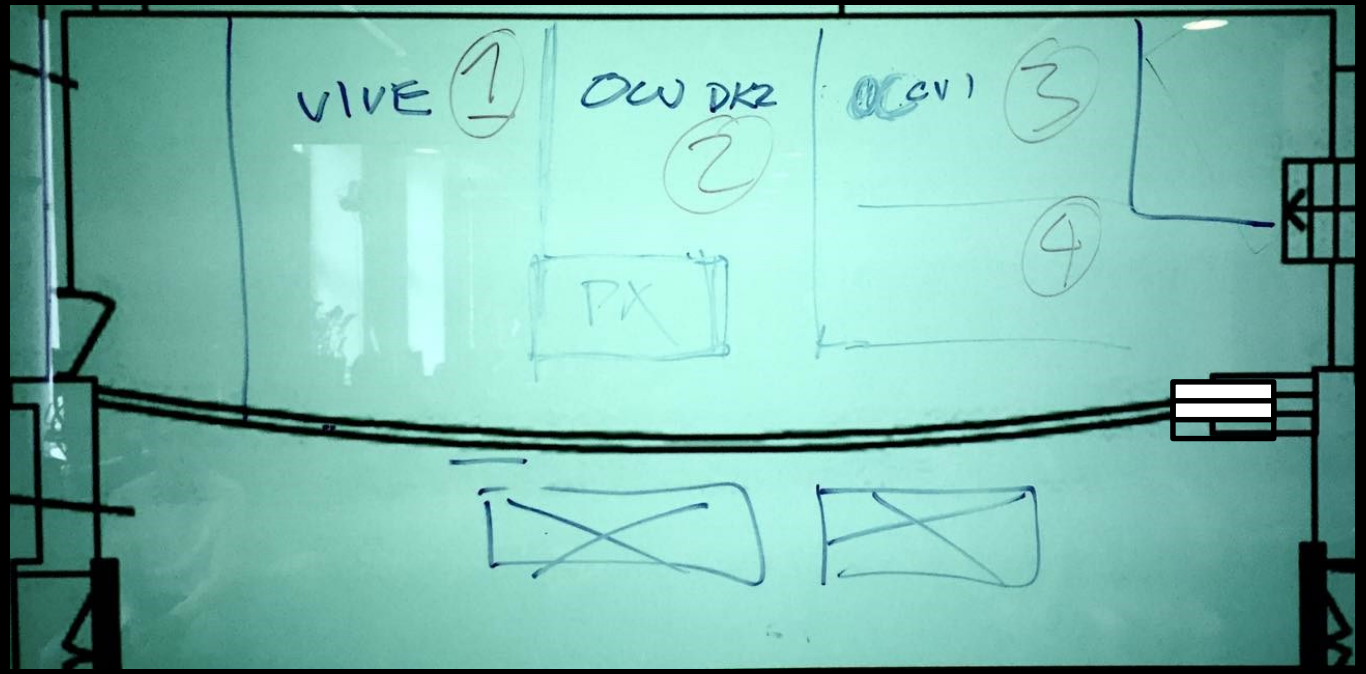
AGI16 P1 Hardware Table																														
	Pixelsense	Kinect 1.1	Kinect 1.2	Kinect 1.3	Kinect 360,1	Kinect 360.2	Kinect 360.4K	Kinect	**HTC Vive**	Oculus CV	Oculus DK1	Oculus DK2	Cardboard	Plastic VR HUD	Samsung Gear	Tablets	Wii Motes	WII IR	Headphones/mic	Headphones	Playstation Controller	Xbox Controllers WS	Xbox Controller Wired		Leap Motion	Tobiiix	Tobiix-pro	TI Sensor Tags	3D Printers	Phones
Hoverbroom										1							2	1												
Pokemon DG													~1		~1													~2		
TowPow	1								1										~2										many	
The Chosen 1s		1 (own)							1 (own)																					
Zield									1																					
SounDark									~1	~1	~1	~1+++							1											
CoCAR	1									1																			many	
Have Mercy															1	many						1								
URGOD									1 (own)										1			~1	~1							many
Pointy Stick									1																					

Debaser 3rd floor stage




TIME:
9:00 - 11:30
12:00 - 14:30
TODO:
ASK GRU
4SEK?
Hoverbroom
Rockemon
Don't Go
TowPow
Chosen Ones
Zield
SounDark
CocAR
Have Mercy
URGOD
Pointy Stick
VIVE
OCU
Wii
Xbox
Sony
Tags
Screens
Tables
Chairs
Boards
COMP 2
TOWER

Debaser 3rd floor stage



Next Tuesday

Demo Rehearsal up for ForskarFredag

Demo: Purpose

Practice for ForskarFredag
Demonstrate state of projects
Interact with each other's projects
Discuss
Improve
BUT…

- Train to:
  - Present in 60 seconds to six-year-olds
  - Observe and gather formative evaluation quantitative and qualitative data in the field
  - Ellicit constructive criticism

Demo: Structure

- Interactive Demo
  08:00
  - Hands-on
  - Non team members
  - Discussion going on
- Context Switch
  01:00

Demo: Roles

- At least:
  - One presenter
    - Present script only
    - Answer questions
  - One observer
    - Take notes
    - DO NOT TALK
  - One inquirer
    - Ask clarifying questions
    - Do not ask leading questions

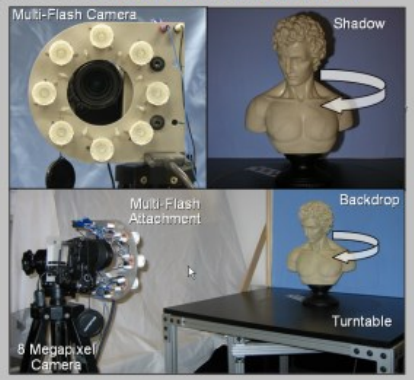
Demo: Presentation on Poster

- One slide
- 2, 3 or 4 columns
  - Motivation and Goals
  - Methods
  - Results
- Few words many images
- Link to how to do and present posters

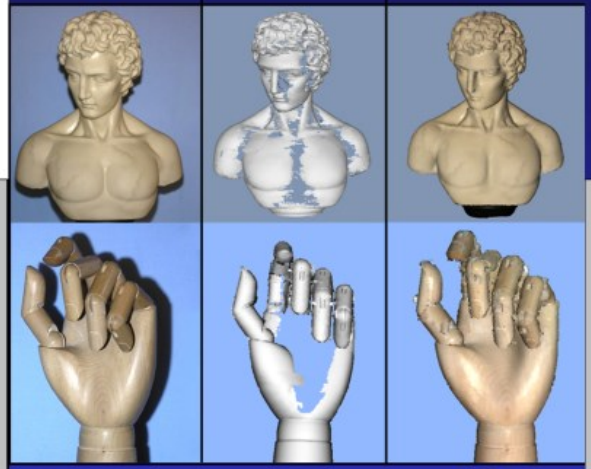
Multi-Flash 3D Photography: Capturing the Shape and Appearance of 3D Objects

A new approach for reconstructing 3D objects using shadows cast by depth discontinuities, as detected by a multi-flash camera. Unlike existing stereo vision algorithms, this method works *even with plain surfaces*, including unpainted ceramics and architecture.

Data Capture: A turntable and a digital camera are used to acquire data from 670 viewpoints. For each viewpoint, we capture a set of images using illumination from four different flashes. Future embodiments will include a small, inexpensive handheld multi-flash camera.



Multi-Flash Turntable Sequence: Input Image	Estimated Shape: 3D Point Cloud	Recovered Appearance: Phong BRDF Model



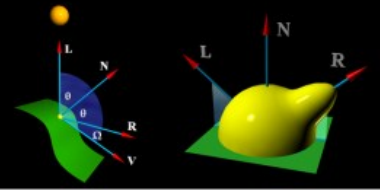
Recovering a Smooth Surface

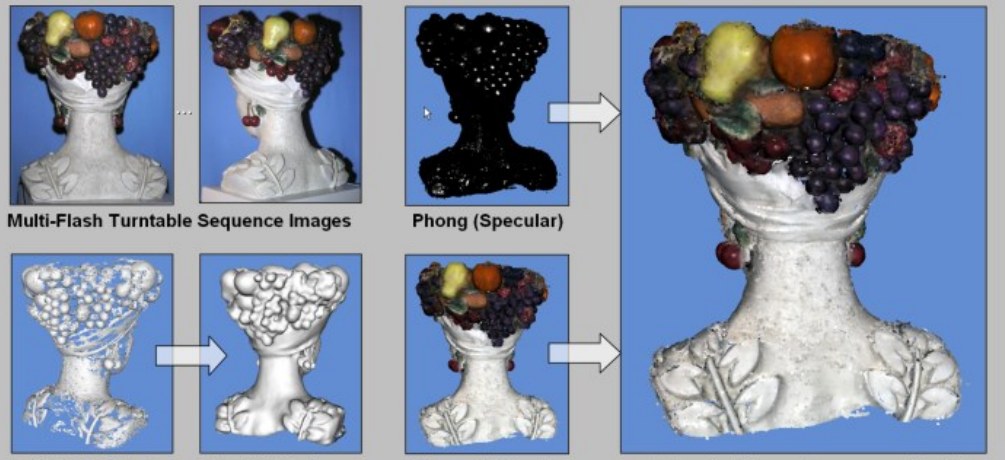
The reconstructed point cloud can possess errors, including gaps and noise. To minimize these effects, we find an implicit surface which interpolates the 3D points. This method can be applied to any 3D point cloud, including those generated by laser scanners.

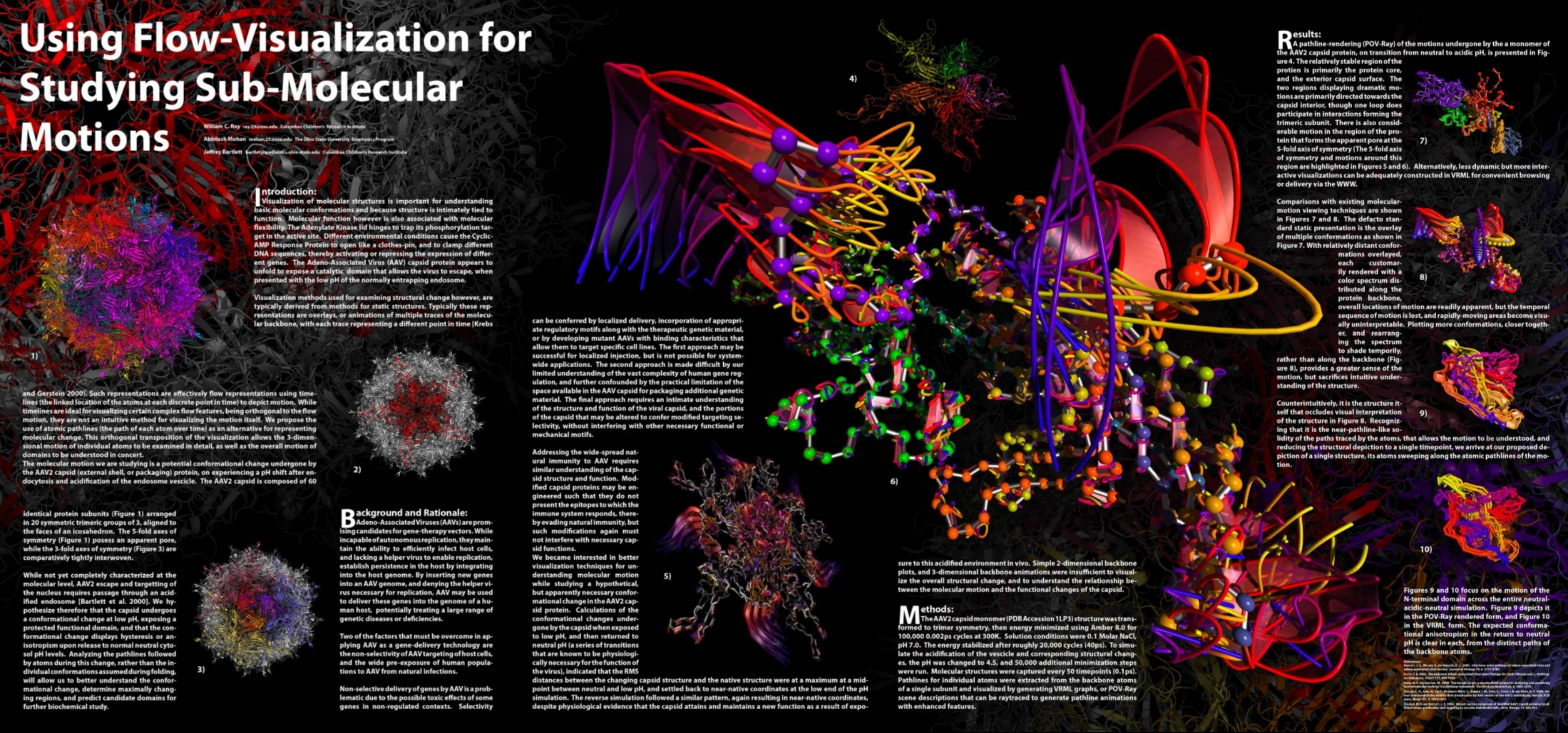
Photometric Reconstruction

Using the implicit surface, we can determine which points are visible from each viewpoint. To model the material properties of the surface, we fit a per-point Phong BRDF model to the set of visible reflectance observations (using a total of 67 viewpoints).

$$I_\lambda = \underbrace{k_{a\lambda}}_{\text{Ambient}} + \underbrace{k_{d\lambda}\mathbf{n}\cdot\mathbf{l}}_{\text{Diffuse}} + \underbrace{k_{s\lambda}(\mathbf{r}\cdot\mathbf{v})^n}_{\text{Specular}}$$







Using Flow-Visualization for Studying Sub-Molecular Motions

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Introduction:

Visualization of molecular structures is important for understanding basic molecular conformations and because structure is intimately tied to function. Molecular function however is also associated with molecular flexibility. The Adenylate Kinase lid hinges to trap its phosphorylation target in the active site. Different environmental conditions cause the Cyclic-AMP Response Protein to open like a clothes-pin, and to clamp different DNA sequences, thereby activating or repressing the expression of different genes. The Adeno-Associated Virus (AAV) capsid protein appears to unfold to expose a catalytic domain that allows the virus to escape, when presented with the low pH of the normally entrapping endosome.

Visualization methods used for examining structural change however, are typically derived from methods for static structures. Typically these representations are overlays, or animations of multiple traces of the molecular backbone, with each trace representing a different point in time [Krebs and Gerstein 2000]. Such representations are effectively flow representations using timelines (the linked location of the atoms at each discrete point in time) to depict motion. While timelines are ideal for visualizing certain complex flow features, being orthogonal to the flow motion, they are not an intuitive method for visualizing the motion itself. We propose the use of atomic pathlines (the path of each atom over time) as an alternative for representing molecular change. This orthogonal transposition of the visualization allows the 3-dimensional motion of individual atoms to be examined in detail, as well as the overall motion of domains to be understood in concert.
The molecular motion we are studying is a potential conformational change undergone by the AAV2 capsid (external shell, or packaging) protein, on experiencing a pH shift after endocytosis and acidification of the endosome vescicle. The AAV2 capsid is composed of 60 identical protein subunits (Figure 1) arranged in 20 symmetric trimeric groups of 3, aligned to the faces of an icosahedron. The 5-fold axes of symmetry (Figure 1) posess an apparent pore, while the 3-fold axes of symmetry (Figure 3) are comparatively tightly interwoven.

While not yet completely characterized at the molecular level, AAV2 escape and targetting of the nucleus requires passage through an acidified endosome [Bartlett et al. 2000]. We hypothesize therefore that the capsid undergoes a conformational change at low pH, exposing a protected functional domain, and that the conformational change displays hysteresis or anisotropism upon release to normal neutral cytosol pH levels. Analyzing the pathlines followed by atoms during this change, rather than the individual conformations assumed during folding, will allow us to better understand the conformational change, determine maximally changing regions, and predict candidate domains for further biochemical study.

1)

2)

3)

Background and Rationale:

Adeno-Associated Viruses (AAVs) are promising candidates for gene-therapy vectors. While incapable of autonomous replication, they maintain the ability to efficiently infect host cells, and lacking a helper virus to enable replication, establish persistence in the host by integrating into the host genome. By inserting new genes into an AAV genome, and denying the helper virus necessary for replication, AAV may be used to deliver these genes into the genome of a human host, potentially treating a large range of genetic diseases or deficiencies.

Two of the factors that must be overcome in applying AAV as a gene-delivery technology are the non-selectivity of AAV targeting of host cells, and the wide pre-exposure of human populations to AAV from natural infections.

Non-selective delivery of genes by AAV is a problematic due to the possible toxic effects of some genes in non-regulated contexts. Selectivity can be conferred by localized delivery, incorporation of appropriate regulatory motifs along with the therapeutic genetic material, or by developing mutant AAVs with binding characteristics that allow them to target specific cell lines. The first approach may be successful for localized injection, but is not possible for system-wide applications. The second approach is made difficult by our limited understanding of the vast complexity of human gene regulation, and further confounded by the practical limitation of the space available in the AAV capsid for packaging additional genetic material. The final approach requires an intimate understanding of the structure and function of the viral capsid, and the portions of the capsid that may be altered to confer modified targeting selectivity, without interfering with other necessary functional or mechanical motifs.

Addressing the wide-spread natural immunity to AAV requires similar understanding of the capsid structure and function. Modified capsid proteins may be engineered such that they do not present the epitopes to which the immune system responds, thereby evading natural immunity, but such modifications again must not interfere with necessary capsid functions.
We became interested in better visualization techniques for understanding molecular motion while studying a hypothetical, but apparently necessary conformational change in the AAV2 capsid protein. Calculations of the conformational changes undergone by the capsid when exposed to low pH, and then returned to neutral pH (a series of transitions that are known to be physiologically necessary for the function of the virus), indicated that the RMS distances between the changing capsid structure and the native structure were at a maximum at a midpoint between neutral and low pH, and settled back to near-native coordinates at the low end of the pH simulation. The reverse simulation followed a similar pattern, again resulting in near-native coordinates, despite physiological evidence that the capsid attains and maintains a new function as a result of exposure to this acidified environment in vivo. Simple 2-dimensional backbone plots, and 3-dimensional backbone animations were insufficient to visualize the overall structural change, and to understand the relationship between the molecular motion and the functional changes of the capsid.

4)

5)

6)

Methods:

The AAV2 capsid monomer (PDB Accession 1LP3) structure was transformed to trimer symmetry, then energy minimized using Amber 8.0 for 100,000 0.002ps cycles at 300K. Solution conditions were 0.1 Molar NaCl, pH 7.0. The energy stabilized after roughly 20,000 cycles (40ps). To simulate the acidification of the vescicle and corresponding structural changes, the pH was changed to 4.5, and 50,000 additional minimization steps were run. Molecular structures were captured every 50 timepoints (0.1ps). Pathlines for individual atoms were extracted from the backbone atoms of a single subunit and visualized by generating VRML graphs, or POV-Ray scene descriptions that can be raytraced to generate pathline animations with enhanced features.

Results:

A pathline-rendering (POV-Ray) of the motions undergone by the a monomer of the AAV2 capsid protein, on transition from neutral to acidic pH, is presented in Figure 4. The relatively stable region of the protien is primarily the protein core, and the exterior capsid surface. The two regions displaying dramatic motions are primarily directed towards the capsid interior, though one loop does participate in interactions forming the trimeric subunit. There is also considerable motion in the region of the protein that forms the apparent pore at the 5-fold axis of symmetry (The 5-fold axis of symmetry and motions around this region are highlighted in Figures 5 and 6). Alternatively, less dynamic but more interactive visualizations can be adequately constructed in VRML for convenient browsing or delivery via the WWW.

Comparisons with existing molecular-motion viewing techniques are shown in Figures 7 and 8. The defacto standard static presentation is the overlay of multiple conformations as shown in Figure 7. With relatively distant conformations overlayed, each customarily rendered with a color spectrum distributed along the protein backbone, overall locations of motion are readily apparent, but the temporal sequence of motion is lost, and rapidly-moving areas become visually uninterpretable. Plotting more conformations, closer together, and rearranging the spectrum to shade temporily, rather than along the backbone (Figure 8), provides a greater sense of the motion, but sacrifices intuitive understanding of the structure.

Counterintuitively, it is the structure itself that occludes visual interpretation of the structure in Figure 8. Recognizing that it is the near-pathline-like solidity of the paths traced by the atoms, that allows the motion to be understood, and reducing the structural depiction to a single timepoint, we arrive at our proposed depiction of a single structure, its atoms sweeping along the atomic pathlines of the motion.

7)

8)

9)

10)

Figures 9 and 10 focus on the motion of the N-terminal domain across the entire neutral-acidic-neutral simulation. Figure 9 depicts it in the POV-Ray rendered form, and Figure 10 in the VRML form. The expected conformational anisotropism in the return to neutral pH is clear in each, from the distinct paths of the backbone atoms.

Celestia A Vocal Interaction Music Game

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ETC global Carnegie Mellon SIGGRAPH2013

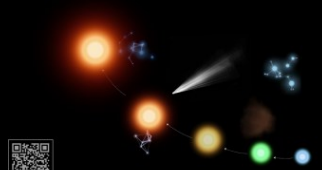
Introduction

Voice is one of the most natural means of expression, we always underestimate our vocal instinct as game interface. what if we use this instinct to power up a beautiful game? Incorporating visualization technique, Celestia uses voice input based on pitch detection as a primary controller, and provides insight into innovation of vocal interaction.

Design

The initial idea came to us as a scenario of someone playing a game using only her voice. She is charmed with this mysterious celestial environment which merges visual and vocal elements seamlessly.

We started with the story, a newborn star wants to grow. However, comets and nebulae might hurt it in its journey. Fortunately, user's voice can help it gain more power by absorbing smaller planets.



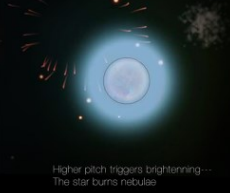
Evolution of the star

Game Play

The purpose is to guide a newborn star through the universe with melody. The user's voice can enlarge the star to absorb smaller planets and survive encounters with comets, nebulae. Every element of the experiential aesthetic is tied to the background music; the constellation is the music visualization with three different colors reacting to high, mid and bass range of the soundtrack in real-time.

Lower pitch triggers expanding…
The star absorbs planets

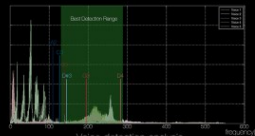
Middle pitch triggers dodging…
The star dodges comets



Higher pitch triggers brightenning…
The star burns nebulae

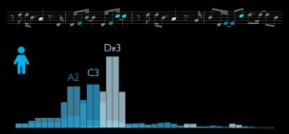
Approach

By using Fast Fourier Transformation algorithm and voice spectrum analysis, we precisely selected 3 pitches as controllers, because they are in the best detection range and are in perfect harmony with background music. The whole experience of playing Celstia can be singing a song by connecting those notes in chord as game progresses. We also adopted two different pitch ranges to accommodate both female and male voices.



Voice detection analysis

3 triggers match background music



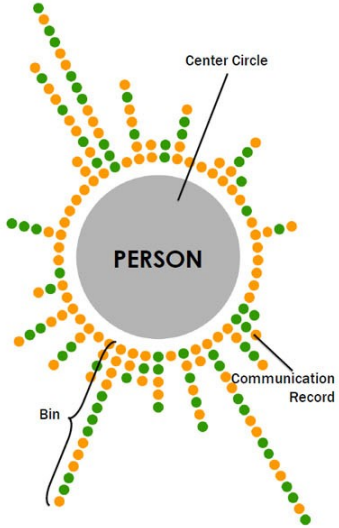
Lower frequency set for male voice

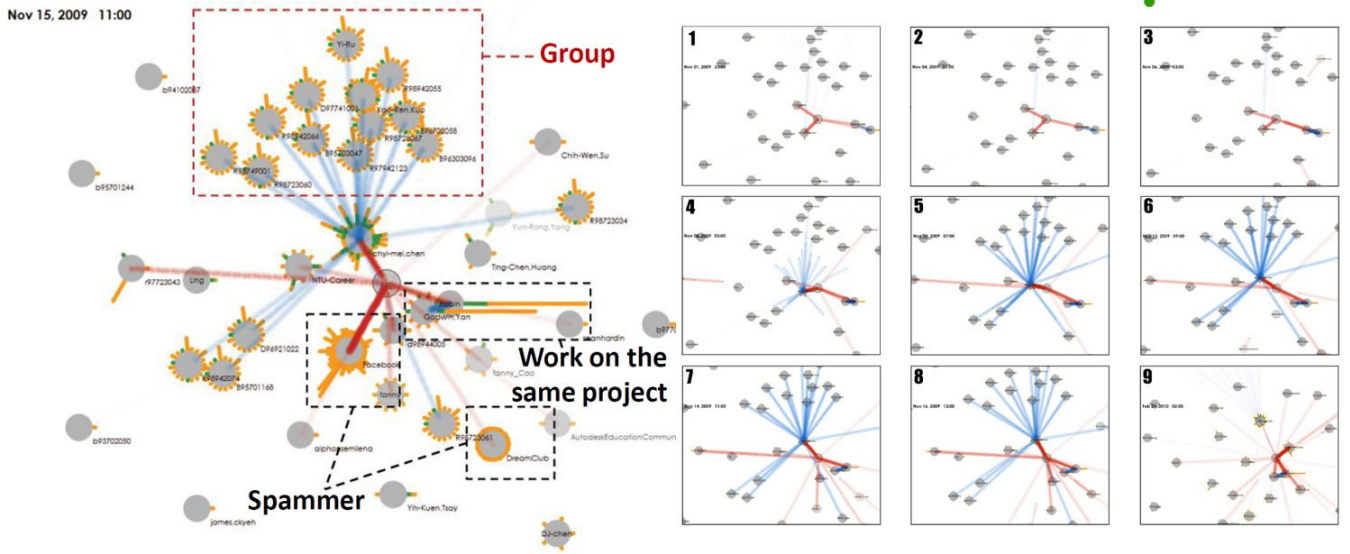
Future Work

We introduced Celestia to a vocalist to improvise the game for a live audience, it turned out to be a great success, people think "it's visually and aurally appealing". Celestia is not confined to human voice, users can play instruments, such as guitar, harmonica or water bells.

We will keep exploring more possibilities of Celestia, iOS version will follow soon…

Presentation of Time-Evolving Activities Using Communication Archive Data





Planetary Defence

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Introduction

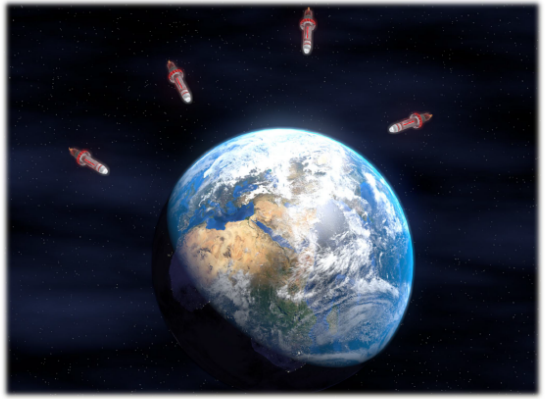
Planetary Defence is an online 3D graphics multiplayer game. You shoot rockets at your opponents and you can shoot your opponents' rockets down.

Motivation

- Build lightweight socializing
- Learn new technologies
- Design Entertainment

Goals

- Multiplayer
- Multiplatform
- High resolution
- 3D game
- On the web



Technology

- WebGL
- Web sockets
- Html5
- Three.js

Interaction

- Swipe / click and drag
- Tap / click

Mobile Game Play

Conclusions

- Real-time 3D graphics
- Multiplayer interaction
- Online
- No downloading!

References

1. Three.js https://github.com/mrdoob/three.js
2. WebGL http://www.chromeexperiments.com/webgl/
3. Parisi, Tony (2012). *WebGL Up and Runing.* USA: O´rilly Media

bit.ly/QwaRhj

Demo: Questions

- Clarifying questions:
  - What do you mean by “so and so”?
  - I don’t understand, could you explain it differently?
  - Could you talk about that further?
  - Tell more about that...
  - How does that make you feel?
  - ”Following” questions

Demo: Questions

- Leading questions:
  - What do you think?
  - Is it working for you?
  - Do you like it?
  - What would you improve?
  - What would you change?
  - Why don’t you like it?
  - Why do you like it?

Observers

- Pen and pad
- Take copious notes
- Count, count, count!
- Take photos
- Record (VERY SHORT) videos – be selective
- Record (VERY SHORT) testimonials

Remember: Deliverable

- Working VIC Demo
- Code with good comments
- Webpage with:
  - Description
    - Goal and motivation of the project
    - Explanation and Justification of the graphics and interaction technologies used and developed
    - Challenges
    - Obstacles
    - Related work
    - Lessons learned
  - Photos
  - "Making of" documentary (2 minutes)
  - Demo Reel (30 seconds)
  - Optional PR material (logo, trailer, flyers, posters, catalog)
  - User testimonials (what did people say)

Demo: Audience

- Take notes
- Comment during demo
- Take notes of comments
- Transfer your notes to the facebook wall
- Help each other

Grading of ForskarFredag

- 10%
- Group
  - 9:00 – 16:00 (- 1% per hour missed)
- Individual component – KTH social
  - Answer the survey which will be posted on Friday, September 26 at 17:00 before Sunday September 28 before 23:55. It is very important that you answer it as soon as possible after ForskarFredag is over.

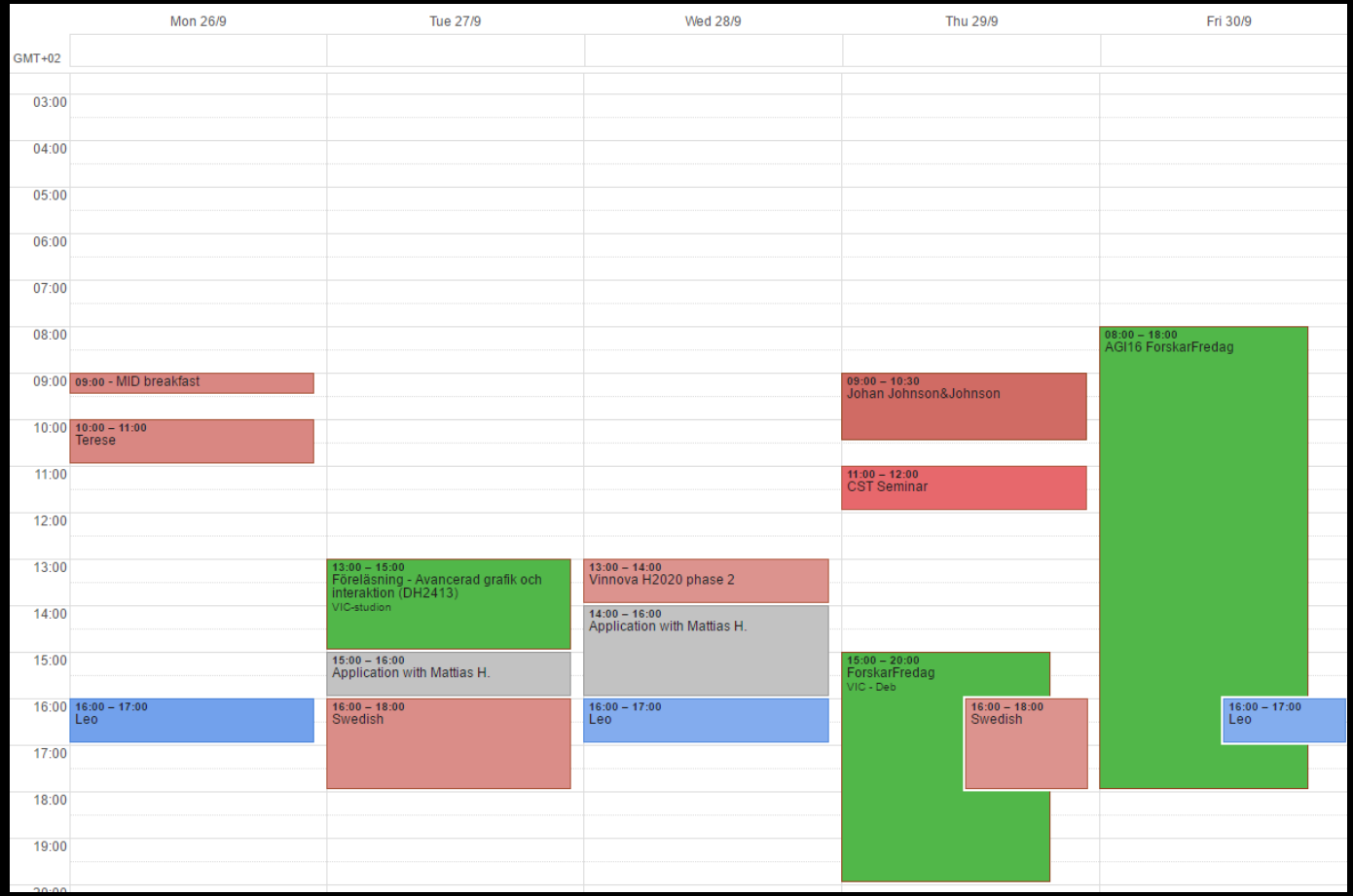
ForskarFredag Survey

- What did you learn presenting, observing, interacting?
- What were the most common questions?
- What were the challenges?
- What were the rewards?
- A few technical questions.

Communication

- Poster feedback
- Printing (Tuesday morning)
- Other communication materials
  - Web page
  - Flyers
  - Logo
  - Slogan
  - …

Ind. Meeting if needed



Assignment 3

- Due Tuesday October 4 at 10 AM
- Everyone
- Share the papers with each other on a google doc spread sheet
- Invite me to the document
- Group the papers into themes
- Prioritize the papers per theme
  - Everyone Votes scores 3 (best) to 1.
- The top 12 papers is your reading list for the following 4 assigments
- I will suggest follow up readings per theme

Individual Grades

- I will create a google doc
- Alias to everyone
- Place individual results there

Questions?