The Potential for IIIF and 3D
Thursday, June 8, 2:00pm to 3:00pm

Attendees (35 people):

Stu Snydman (Stanford)
Chris Edwards (J. Paul Getty Trust)
Adriano Pasquali (University of Toronto)
Mike Appleby (Yale)
Jon Stroop (Princeton)
Tuan Pham (Cambridge)
Hal Blackburn (Cambridge)
Sophie Dixon (Holoscene)
Rachel Di Cresce (Toronto)
Maile Thiesen (The Met)
Jana Rajakumar (Toronto)
Monica Ung (Toronto)
Ed Silverton (holoscene.io)

Agenda:
- Introductions and demos
- What are the use cases?
- Forming a IIIF 3D Community Group

Demos:

CutLab3D Samples (Berlin)
Cultural Heritage Digitization department
- Digitization practices
- Augmenting process, modular scanning pipeline in which each stage will improve the quality
- QR code
- First station: arc scanners, all photogrammetry, 153 pictures from above and 9 from below, identify holes in the model while the rest of the scanning happens
- Algorithm for the least number of perspective you get most of the service
- Take all pictures from two scanners
- Step 2: once you have the 3d models you want to annotate them
    - 3d centred annotation tool which was standalone
    - Metadata CDOC CRM compatile
    - Fedora Commons engine to connect ontology and/or database
    - Eventually be open source
- Internal project: consolidated 3d models (CT scan, MRI etc.)

Smithsonian
- Smithsonian X 3D viewer
- Model on left and right side has more information
- Storytelling experiences tool
- Annotation - hot zone annotation via colouring
- Shareability (unique URL to share)
- Interoperability and open is desired
- Viewing modes, manipulate photo controls
- Difficult to integrate scanning technologies
  - Hard thing to overcome to make 3d capture more accessible
  - Ways to integrate photogrammetry with other scanning techniques
  - More computer scientists working on this problem

Ed Silverton
- [Three.js](#) extension for Universal Viewer VR

Frederico
- Interoperability
- Presentation is here: http://pc-ponchio.isti.cnr.it/iiif/#frame8826
- Scene Graphs are not interoperable - cannot read each other (gITF, X3Dom, Three.js)

Notes:

Next steps for the IIIF community…
- Jon Stroop: I like the idea of a community group because what we've run into wht A/V is that there's already standards emerging outside of IIIF. So there is a tension there do we connect with these or is it emerging enough that we don't go that route.
  - Having a community group answering the "what's already there as a best practice? What is it? What is the role?"
  - Create those use cases and understand what our role should be
- Chris: There are experts in this field and we are not going to be the ones to lead the charge. Lack of knowledge of standards in this field and where is it going. Development will be drive by other communities outside of heritage. We should tap the knowledge to get the big players, can we leverage them and make them interoperable
  - For example: Getty wants to share architectural models. It would be a dream to create your own collections of these models? Do we make agreements to use the same technologies? We should move slowly to see what are the problems

- Such a big space with so many options which can be a problem. Easy to go the wrong way. Identify key, simple use cases.
- John: Go into a different territory where it is hard to find commonalities and map them to similar ways of doing things. What kind of experience do you want to offer? And for whom?
- Ed Silverton: UV is a generalized architecture that 3d could be integrated into for viewing. Presentation 3.0 tweak: We could turn the Presentation API to entity rather than canvas.
- Jon Stroop: Spec the way we can relate things to each other including AV
- Canvas remain an abstract container and we can layer in entities
- Stu: First principles of IIIF what were some of the driving reasons? Dissatisfaction with viewing experience, comparison, annotation in a distributed institutional context. For me the question is: There are similar use cases and drivers to help address similar problems for heritage institutions and 3d content. Are we motivated by the same use cases or are there other ones?
- What I'm seeing a lot we want to get into 3D for the sake of it. We are not experts in this field like we would with images.
- Tom Cramer: Would dispute if we knew exactly what we wanted to do with images. Took years to get the point of expertise. What IIIF offers is a place to work together to figure out what we want to do. Even just knowledge sharing in the community would be great.
- Expanding outreach of IIIF into other areas
- Quarterly call: All raised their hands
- Drafting a charter
- A small working group can emerge
  - Ex. outreach to experts
  - Collecting use cases
- I see a parallel with TEI - can be too much to know to be an expert but can become also extremely specialized. I worry about people who aren't really in the community and their ability to understand.
- A lot of it has to do with the documentation - reducing a canvas to a content container. Just need to make it really clear.
- Coming from a 3D world to me images are just an extension of 3D models. Discussions now on how to describe, tag content so that we can make it available to a wider community. Standard will be interoperable.

Action Items:
1) Use Google Doc and draft a community charter and go through the process (Stu)