

## **Photogrammetry & Sketchfab Training for Cultural Heritage**

Date: Friday 28 July, 2017

Time: 10am - 4pm

Location: [Museum of London](#), London Wall

Please arrive at the main reception of the Museum of London, London Wall, at 10am, where you will be met by a member of staff.

**Trainer / Facilitators:** Thomas Flynn, Cultural Heritage Lead, Sketchfab and Alec Ward, MDO: Digital and Communications

**Please note:** Bringing your own laptop, camera, smartphone and an object to scan (think takeaway coffee cup size), will be necessary.

### **What will be covered?**

The aim of this training is to give museum and cultural heritage professionals a head-start in creating and sharing 3D content using accessible and affordable tools.

The one day workshop will give participants an introduction to 3D and its uses in CH, the practicalities of photogrammetry and how to make the most of sketchfab.com when sharing 3D online.

### **Attendee Requirements**

Participants will need to bring, or have access to:

- A digital camera (a compact or even a smartphone is fine)
- A laptop with (at least) a [30-day free trial of Agisoft PhotoScan Standard](#) and a copy of [Meshlab](#) (free)
- A [Basic Sketchfab account](#) (free)
- If you like, something small to scan, the size of a coconut or grapefruit.  
*Remember though: nothing shiny or transparent or too small!!*
- ✓ If attendees are feeling keen, they can look through this [basic workflow for PhotoScan](#) (includes link to [demo image set](#)).

## Approximate session timetable:

Please note that the below timings are approximate – some sections may take longer or shorter than advertised. We do aim to be finished by 4pm, however.

10am	Welcome and introduction to concepts of 3D, example of uses in Cultural Heritage, and outline of the photogrammetry process.
10.30am	Set up photography area(s) / find suitable subject Begin photographing subjects, max 50 images. Review images.
11am	<b>PhotoScan Workflow</b> <ol style="list-style-type: none"><li>1. Load into PhotoScan, tour of interface.</li><li>2. Align images - depending on hardware this can take some time.</li><li>3. Assign region of interest (the bit we are going to make full 3D)</li><li>4. Process Dense Point cloud - depending on hardware this can take some time.</li><li>5. Clean up point cloud. <i>Troubleshooting</i></li></ol>
12.30pm	<i>LUNCH</i>
1.30pm	<b>PhotoScan Workflow continued.</b> <ol style="list-style-type: none"><li>6. Create Mesh</li><li>7. Mesh Decimation and cleanup</li><li>8. Texture</li><li>9. Export</li></ol> <b>Upload to Sketchfab</b> <p><i>Account creation if required.</i> Add title, description, category and tags Edit 3D settings:</p> <ul style="list-style-type: none"><li>• Straighten, center and zoom</li><li>• Set background</li><li>• Set Lit or Shadeless</li><li>• Annotations</li><li>• Post-processing Filters</li><li>• VR setup</li></ul>
2.30pm	<i>BREAK</i>
3pm	Sharing - Twitter, Facebook, WordPress Recap, troubleshooting and questions.
4pm	End

## Learning objectives

By the end of this course you will be able to:

- Understand the process of photogrammetry
- Indicate use cases for the cultural heritage sector and in your own institution
- Capture digital images for use in 3D model processing
- Use those images to create a 3D model
- Learn how to upload a 3D model to the internet, style it with background and lighting effects
- Share or embed 3D online, via Sketchfab

## Support towards Museum Accreditation:

Organisational Health:

Standard 1.4 Effective forward planning

Users and their experiences:

Standard 3.1 Good quality services and development

3.2 User focused experience

3.3 Effective learning experience

Collections:

Standard 2.2 Development policy

Please specify on your application any particular areas of need or focus and we will try and accommodate these into the day and tailor the session to the level/expectations of participants.

Please ensure you have your line manager's permission to attend before booking your place as confirmation is sent to the museum. Final confirmation of places will be sent out at least a week prior to the event. Please keep 16 May available in your diary until your place has been confirmed. Priority is given to staff and volunteers working in non-national museums in the London region.

Refreshments will be provided.



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