

CATAN Resources Projectioin

Tamir Blumberg & Amitay Regev

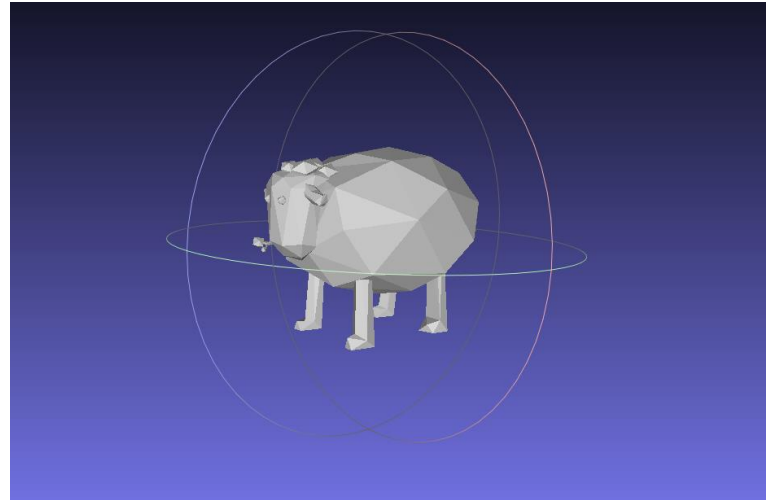


Main Steps

- 3D Models and Sampling
- Photo Shoot
- Camera Calibration
- User Friendly app using Tkinter

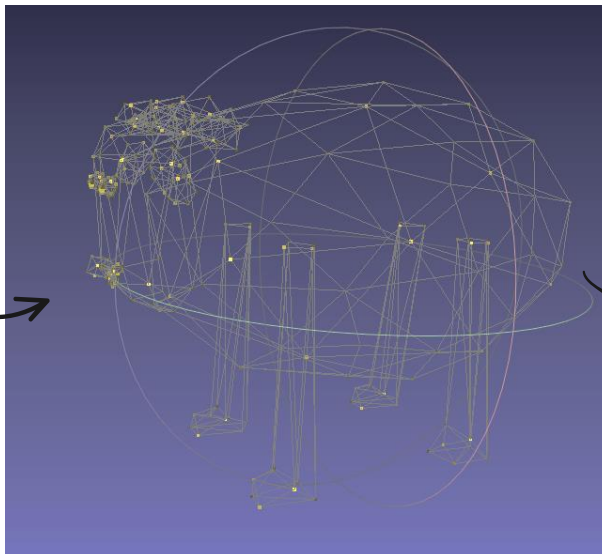
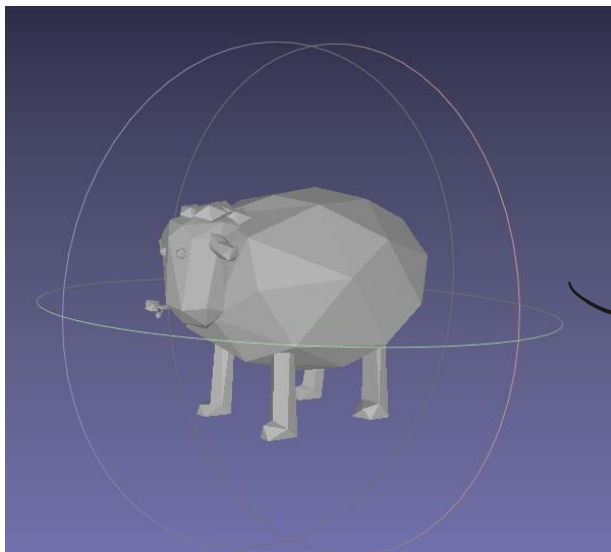
3D Models and Sampling

1. Starting from 5 free models found online
2. Sampling using MeshLab
3. Parsing points and edges



3D Models and Sampling

3. Parsing points and edges



```
sheep - Notepad
File Edit View

#####
#
# OBJ File Generated by Meshlab
#
#####
# Object sheep2.obj
#
# Vertices: 424
# Faces: 616
#
#####
mtllib ./sheep2.obj.mtl

vn -0.003090 -0.006837 -0.006586
v 0.898462 0.634062 0.218714
vn -0.001912 -0.007023 0.004879
v 0.001071 0.621016 0.275726
vn 0.007644 -0.004836 0.004637
v 0.953447 0.645265 0.263516
vn -0.002255 0.002866 0.008790
v 0.888969 0.687532 0.291969
vn 0.004020 0.006277 0.001044
v 0.933020 0.695259 0.282995
vn 0.005173 0.003749 -0.005446
v 0.928259 0.675291 0.214312
vn -0.003628 0.007779 -0.004660
v 0.892236 0.690918 0.224727
vn -0.007848 -0.000399 -0.000726
v 0.858487 0.666207 0.256444
vn 0.001896 -0.001577 -0.001933
v 0.933293 0.638937 0.226088

Ln 6, Col 20
```

3D Models and Sampling

3. Plotting

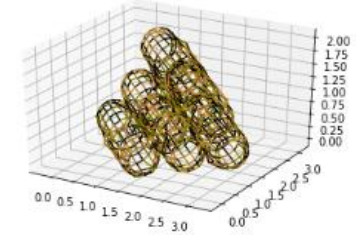
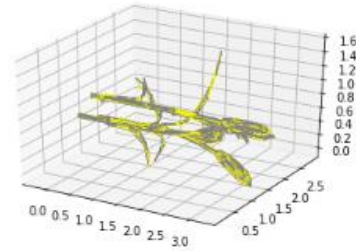
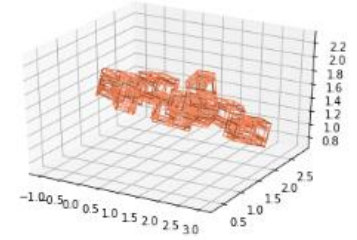
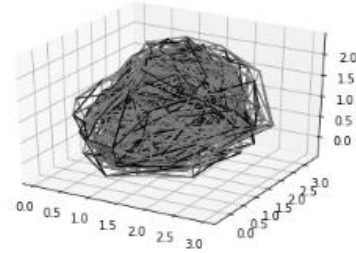
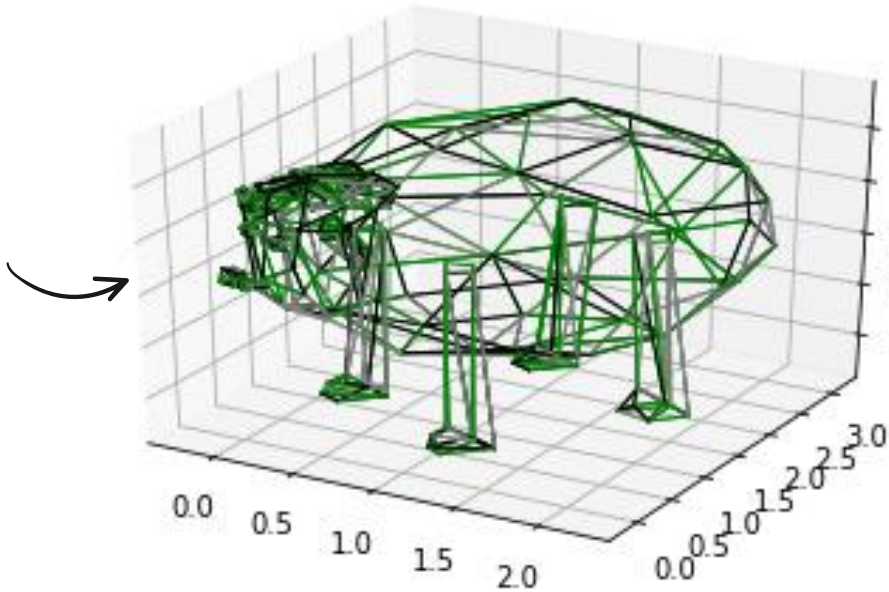
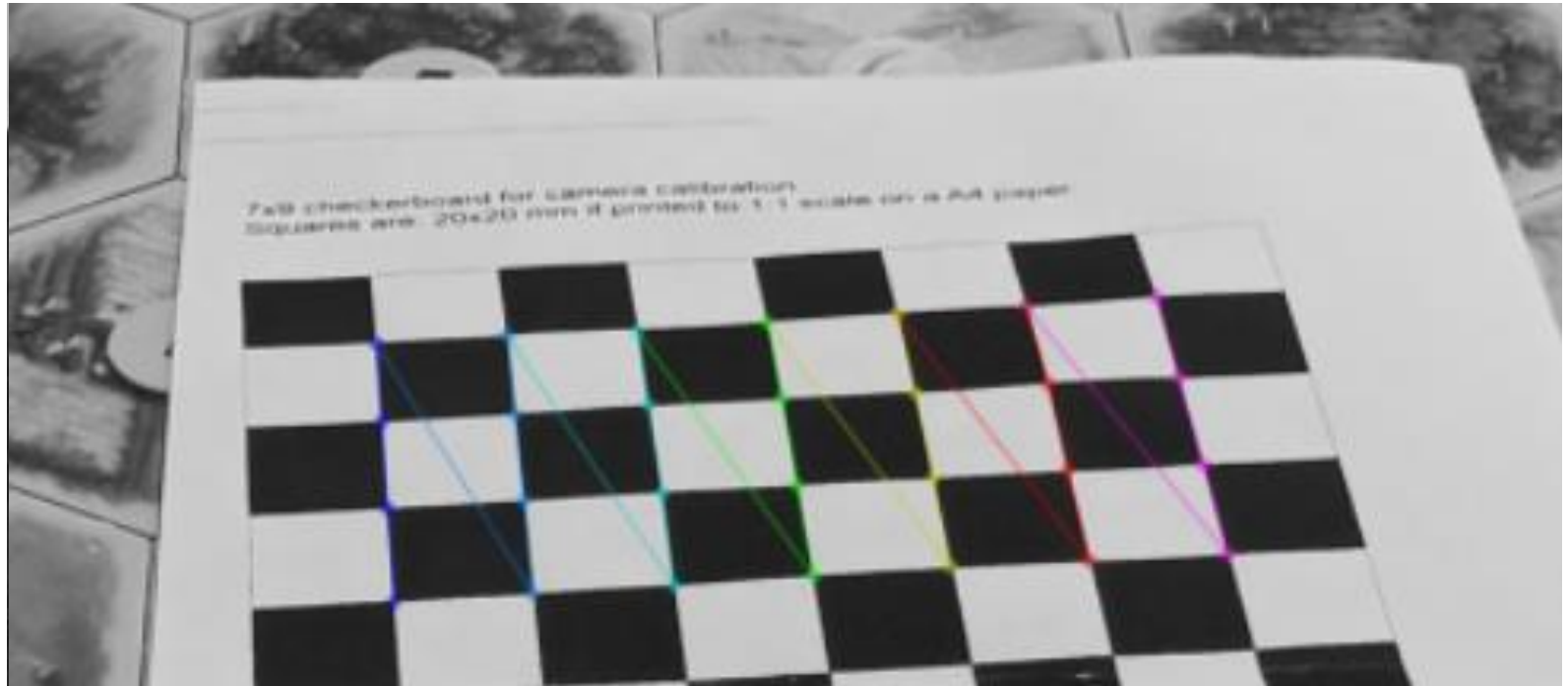


Photo Shoot

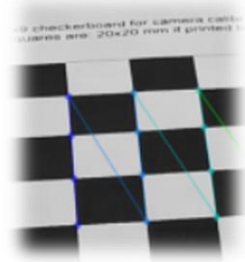
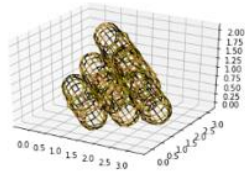
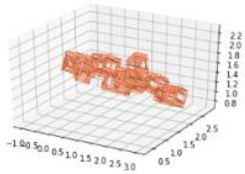
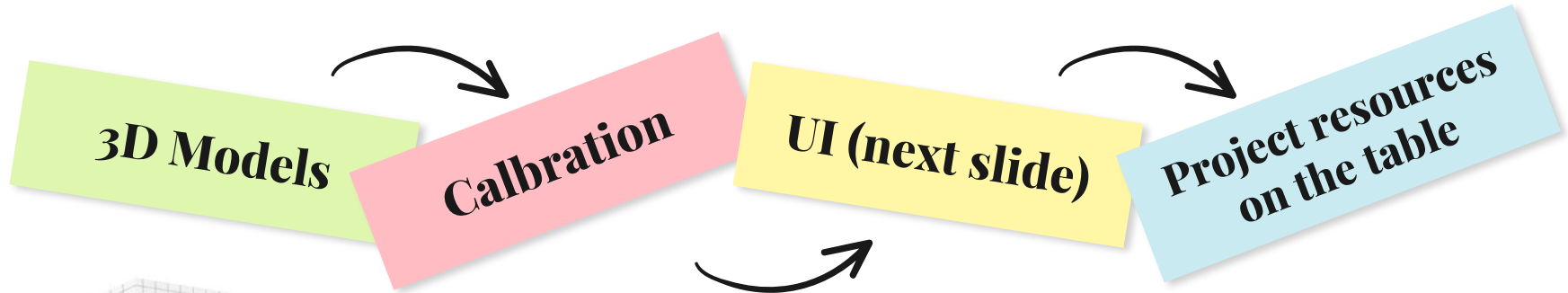


Camera Calibration

Just like in the good old days (HW1)...

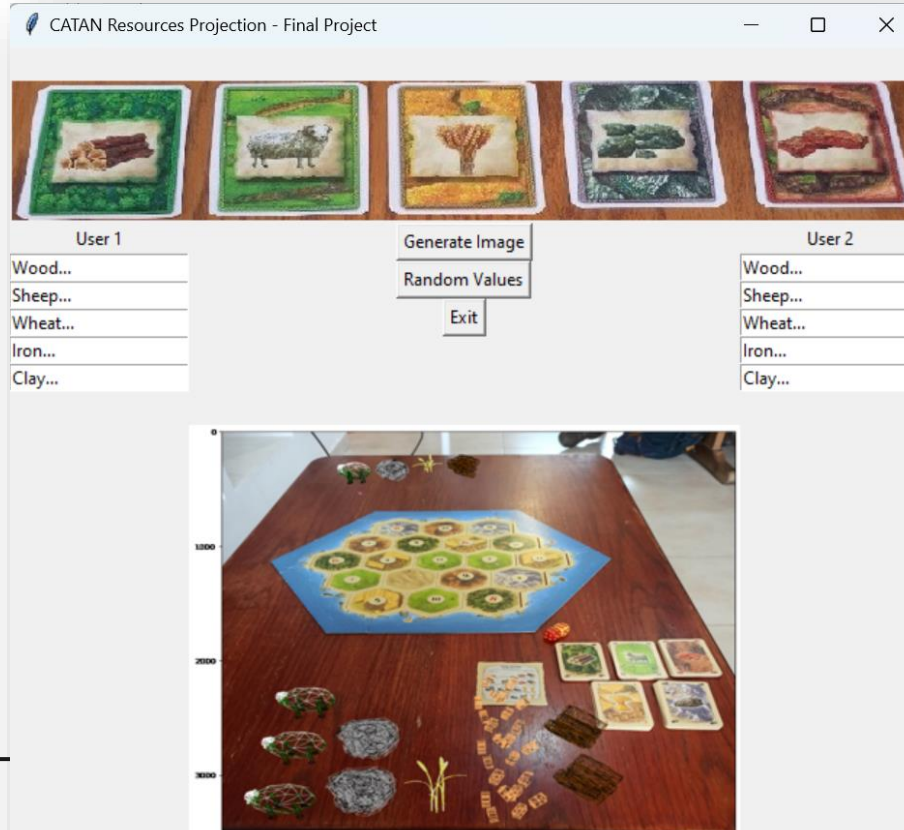


General Flow Reminder



UI using Tkinter

Our App:



Tkinter- Tk interface

standard python library

used to create visual and
interactive user interfaces



Questions?