

# **2022 3D Scanning**

**The fun...**

**Chris Coley NSS July 2022**

# **Why I decided to try 3D scanning...**

**And am still not sure it makes sense...**

- Scan an object to turn in to a 3D model to print
- Scan an object so I can use the 3D model in CAD to create add on's
- Or use the model in DAZ 3D to be able to pose a figure to fit

# 3D Scanning methods.

- iPhone or Android APP, Application on the computer.
- Latest iPhone and iPads have 3D sensors and APPs for 3D scanning
  
- Photogrammetry
  - Take lots of pictures and stitch them together
  - 3DF Zephyr (<https://www.3dflow.net>)
- Laser Scanning, Structured Light
  - Projects a pattern and based on that patterns distortion determine the depth
  - Microsoft Kinect, Revopoint 3D (<https://www.revopoint3d.com>), Some industrial scanners...
- Time of Flight / Lidar
  - Effectively measures the distance to a point in space based on how long the light takes to get there
  - Microsoft Kinect 2, iPhone/iPad 3D sensor...

# Specular and Lambertian...

## What do these words mean

- Specular
  - This is like a mirror reflects light away from the source in most cases
  - Or directly back blinding the camera
- Lambertian
  - Reflects light in all directions

# Spray Paint...

**You have to paint your models well almost...**

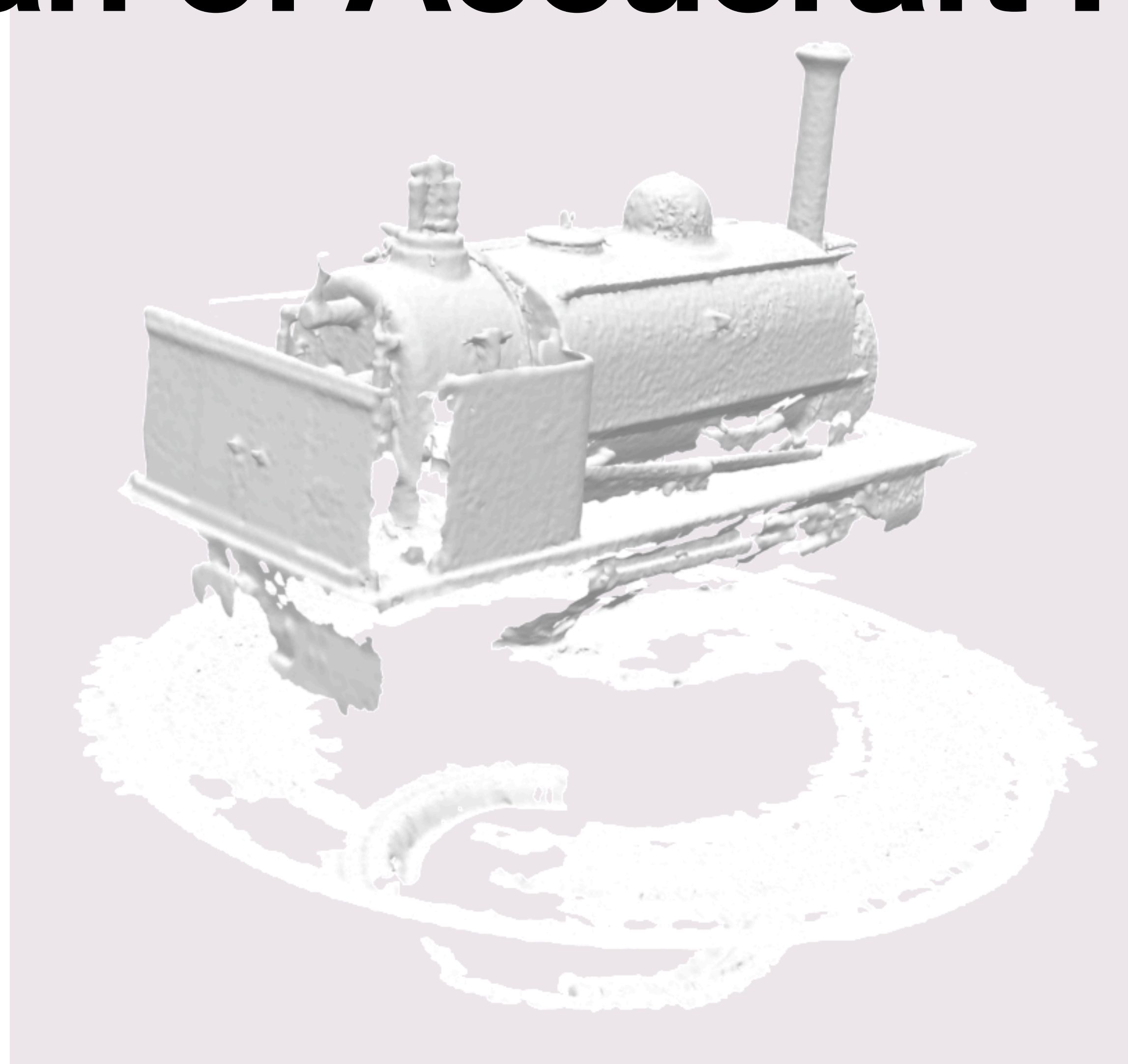
- AESUB White (Permanent sort of)
- AESUB Blue (Lasts a few hours)
- AESUB Orange (Lasts a few more hours...)
- Dry Shampoo Spray (Wash off when you are done)
  - Oh by the way they lie. They are all white...

# 3D Scan of Bob Sorenson



And we didn't have to paint him 🤪

# 3D Scan of Accucraft Hunslet



Almost good enough to pose a figure in DAZ 3D 😊