

Reconstrução Fotogramétrica

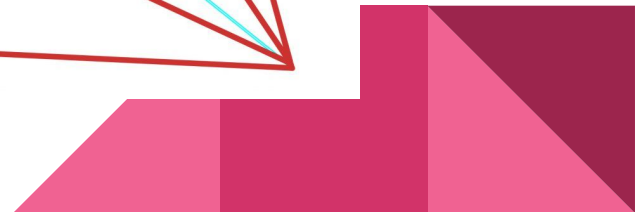
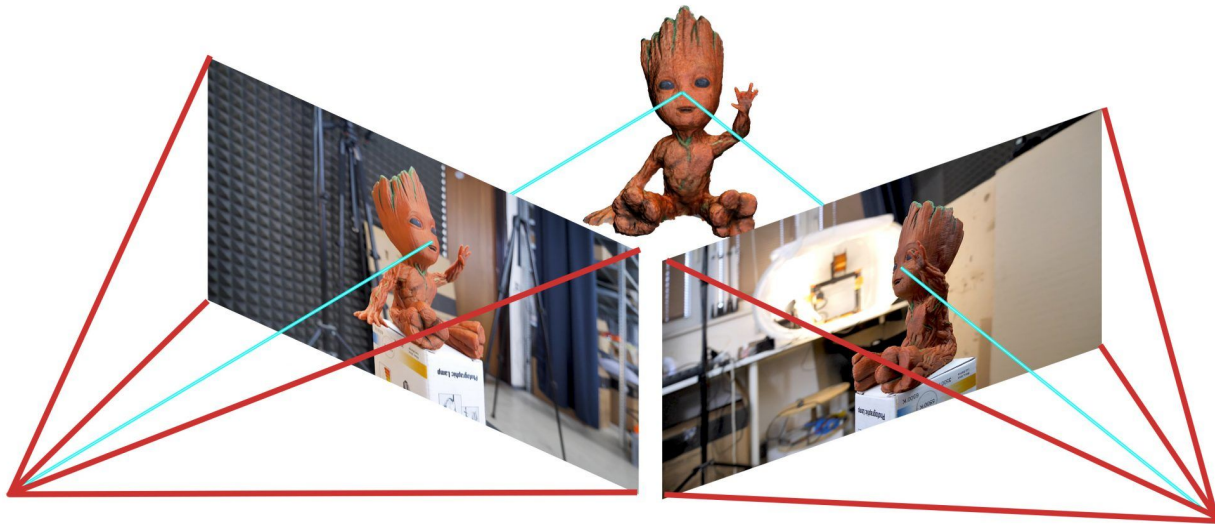
Construindo modelos 3D a partir de fotos

Topicos

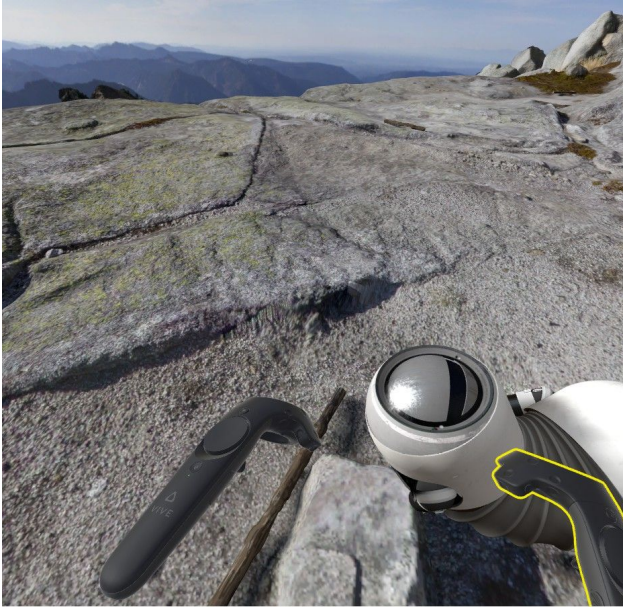
- O que é
- Onde é usado
- Como é feito
- Prática



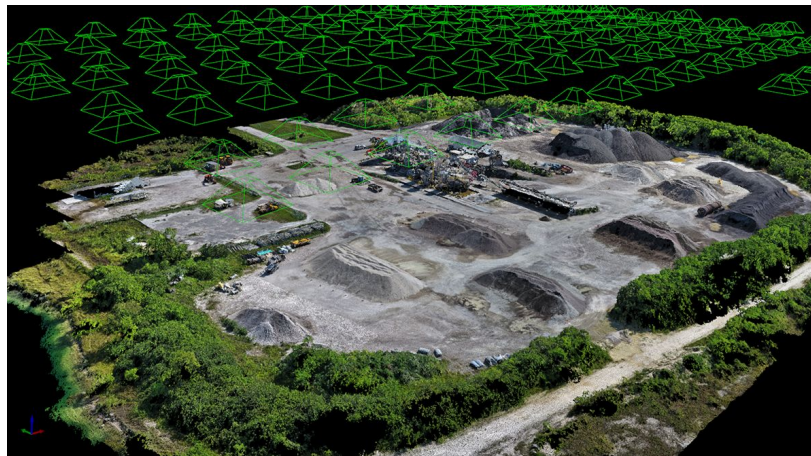
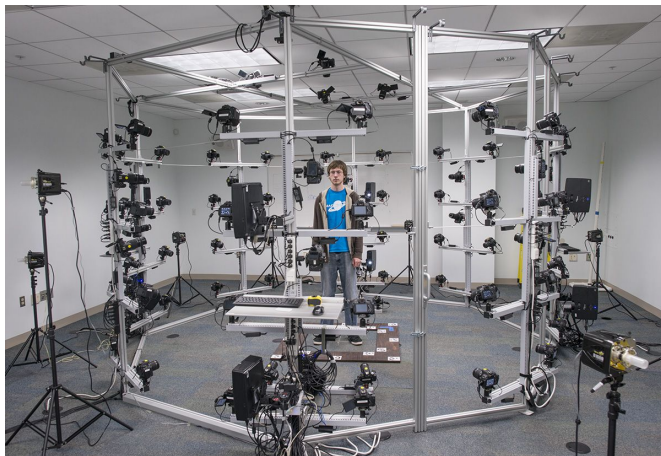
O que é?



The Lab : Vesper Peak



Muitas fotos



IMG_0022.JPG



IMG_0023.JPG



IMG_0024.JPG



IMG_0025.JPG



IMG_0026.JPG



IMG_0027.JPG



IMG_0028.JPG



IMG_0029.JPG



IMG_0030.JPG



IMG_0031.JPG



IMG_0032.JPG



IMG_0033.JPG



IMG_0034.JPG



IMG_0035.JPG



IMG_0036.JPG



IMG_0043.JPG



IMG_0044.JPG



IMG_0045.JPG



IMG_0046.JPG



IMG_0047.JPG



IMG_0048.JPG



IMG_0049.JPG



IMG_0050.JPG



IMG_0051.JPG



IMG_0052.JPG



IMG_0053.JPG



IMG_0054.JPG



IMG_0055.JPG

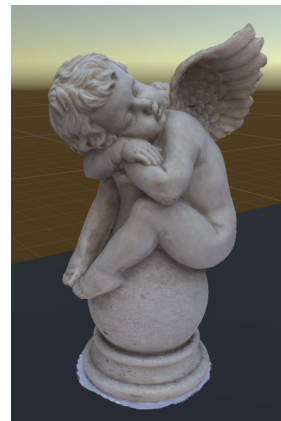
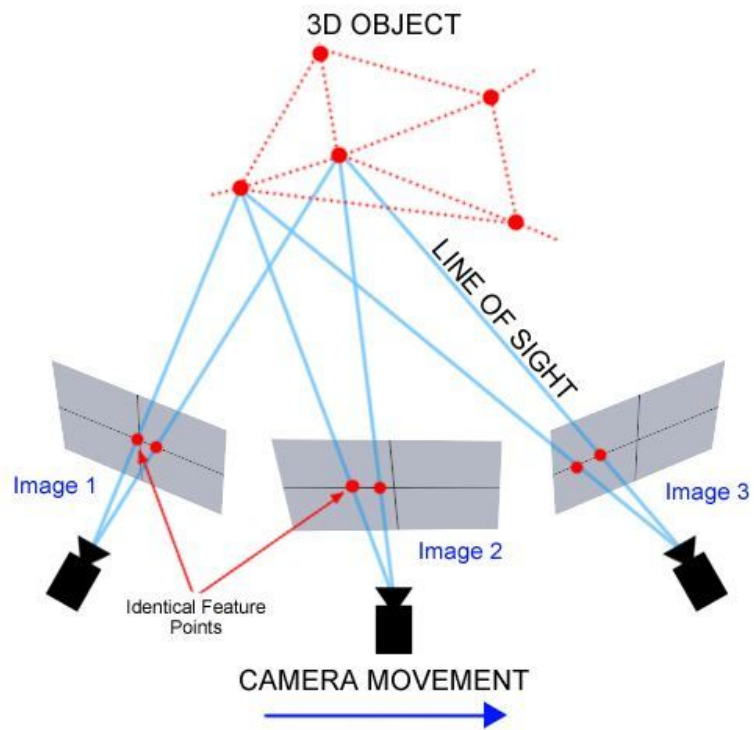


IMG_0056.JPG



IMG_0057.JPG

Pontos notáveis



3D Zephyr free

Versão gratuita limitada a 50 fotos

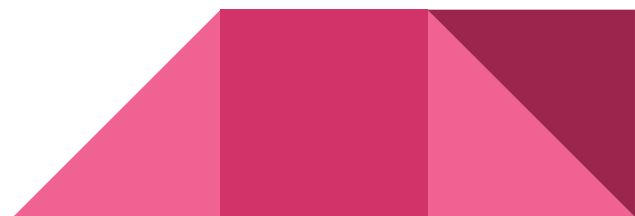
www.3dflow.net



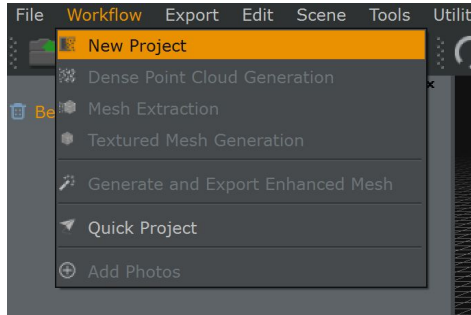
3DF Zephyr

3DF ZEPHYR FREE

PHOTOGRAMMETRY FOR EVERYONE



1- Cameras e Sparse Point Cloud



IMG_8193.JPG



IMG_8194.JPG



IMG_8195.JPG



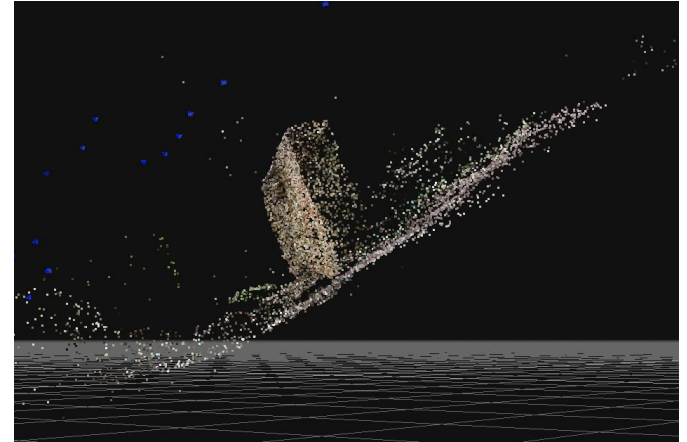
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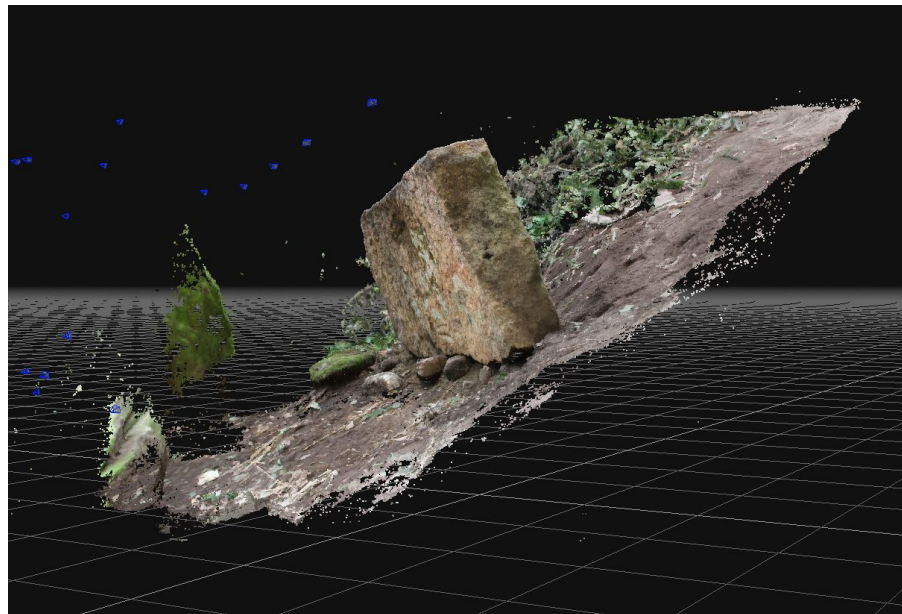
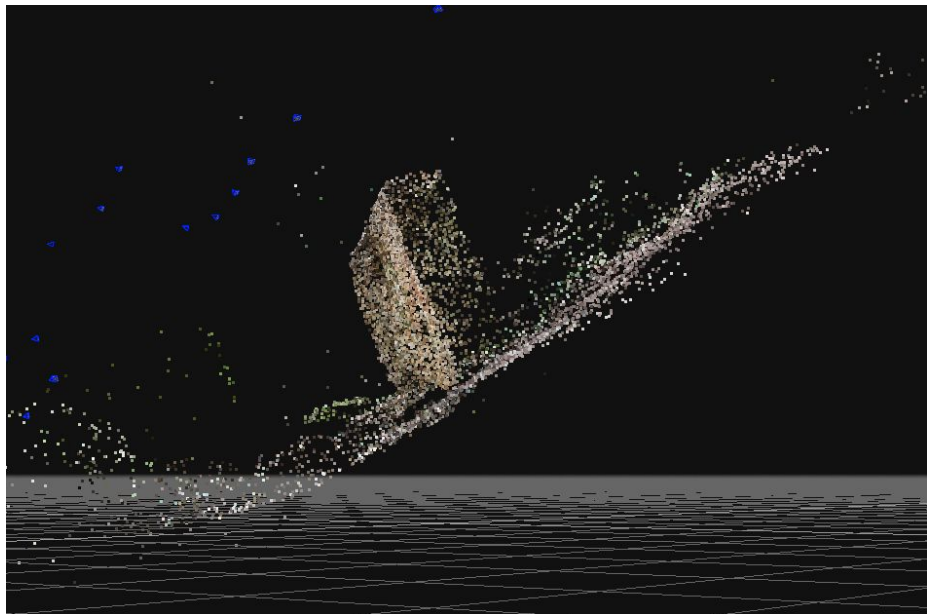
IMG_8220.JPG



IMG_8221.JPG



2- Densification

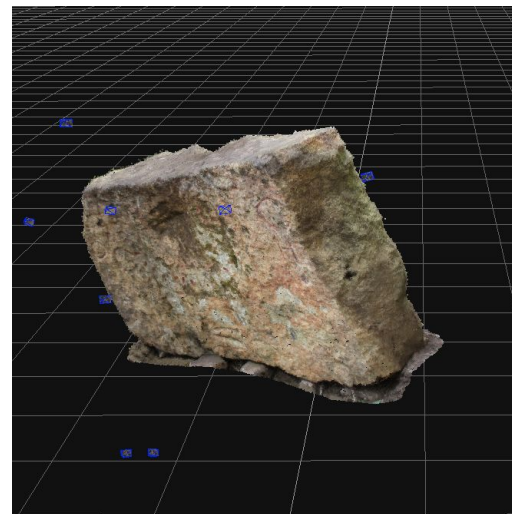
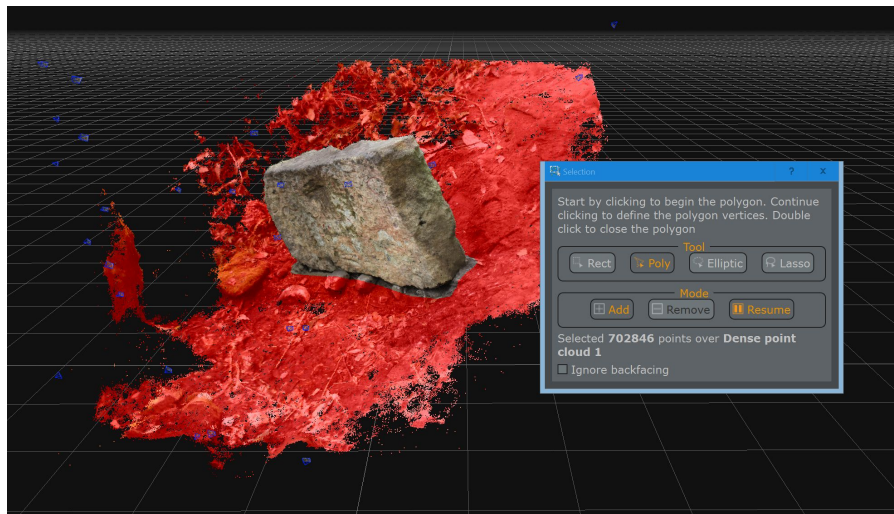


Limpeza de ruídos

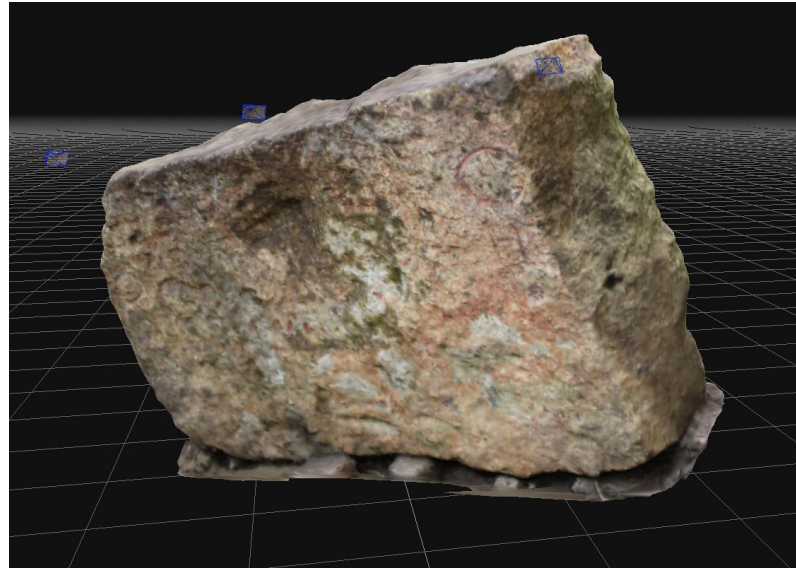
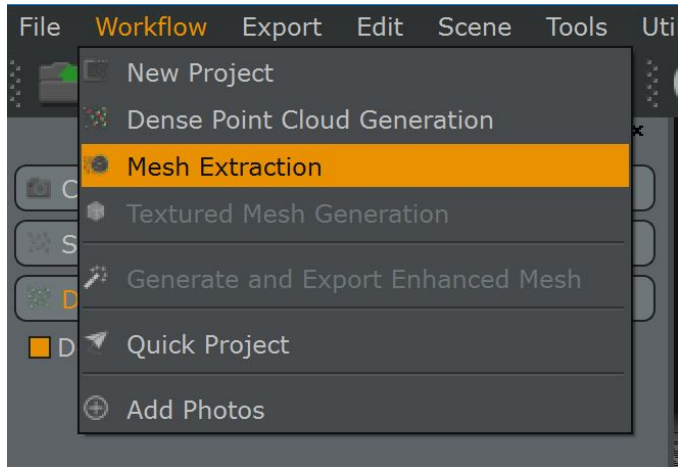
SELECIONA
PONTOS



APAGA



3- Mesh



4- Textured Meshes

Max Texture Size: 4096

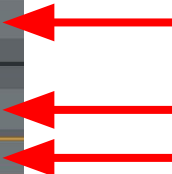
Image Resolution: _____

Max number of vertices: 20000

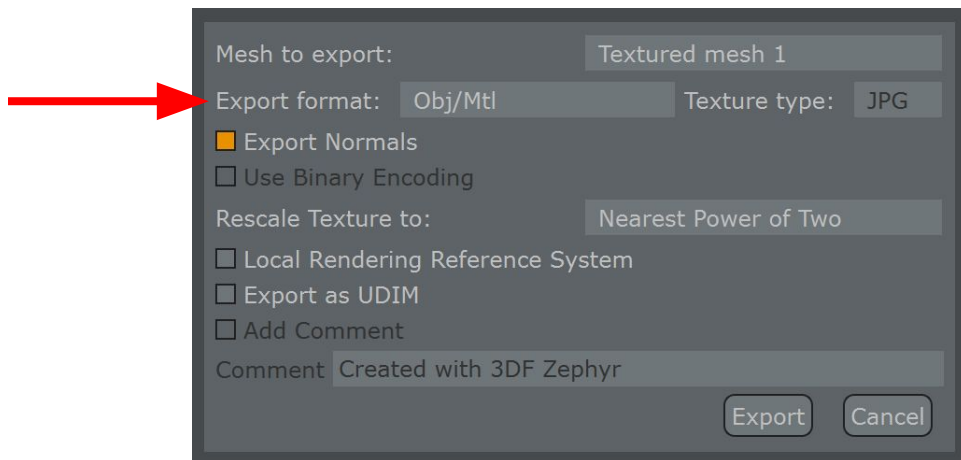
Max number of textures: 1

Sharpness filter: _____

Generate 32-bit textures:



5- Export as OBJ



Projeto - planejamento

- Para semana que vem (entrega pelo representante no e-disciplinas):
 - Projeto Unity:
 - Cenas: esboço 3D concluído
 - Prefabs: substituir todos os 'placeholders' por modelos (podem ser preliminares ainda)
 - Protótipos dos métodos de locomoção previstos
 - Planejamento:
 - Para cada interação prevista, listar prefabs e scripts do SteamVR a serem utilizados ou descrever pseudocódigo dos scripts.



Exercícios para casa

- Pos graduação: pegar oculos anaglifo
 - Antonio R. Gonçalves Crespo
 - Bruno H. P. da Silva
 - Carlos Eduardo Santi
 - Lucas H. Sallaberry

- **Alunos da graduação: devolver óculos**



Próxima aula

Toques finais

Performance, otimização, luz e efeitos

