

# 3D computer graphics project

---

Anelia Dimitrova, Ruqing Sun, Xiaoxu Gao

# Blender: Modelling / Animation Pipeline

- General modelling
- Model unwrapping
- Fixing the model parts on a UV map (setting up the resolution)
- Burn an Ambient Occlusion Map (shadows)
- Texturing in Photoshop
- Rigging
- Animation

# Blender: Main character

From sketch..



Credits for sketches: Marcus Segerros

# Blender: Main character

To model..

Modelling in Blender

Texturing in  
Photoshop on:

- Ambient Occlusion map  
(Burn effect) =  
shadows, based on  
light source  
(averages the ambient  
lighting with diffuse  
lighting)
- UV map  
(unwrapped model)

“Realistic look” with  
real person’s eyes,  
lips, with skin  
pattern and jeans  
pattern



**Nickname:** Dude  
**Eyes:** Green  
**Appearance:** Slightly Asian  
**Hair:** Black



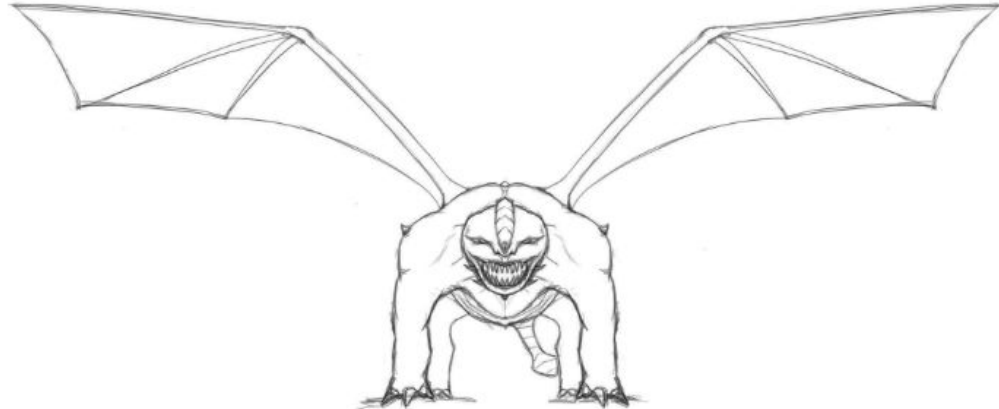
# Blender: Main character

Animation



# Blender: Final boss

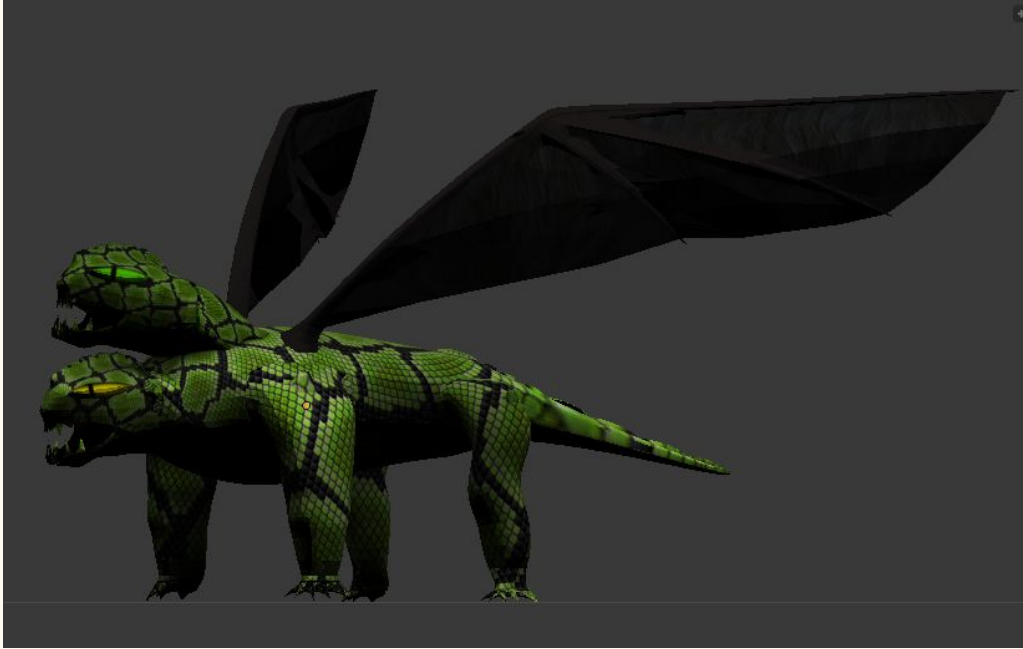
From sketch..



Credits for sketches: Marcus Segerros

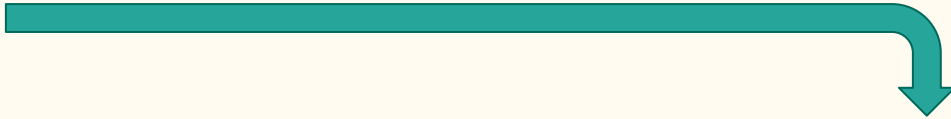
# Blender: Final boss

To model..



# Blender: Main character

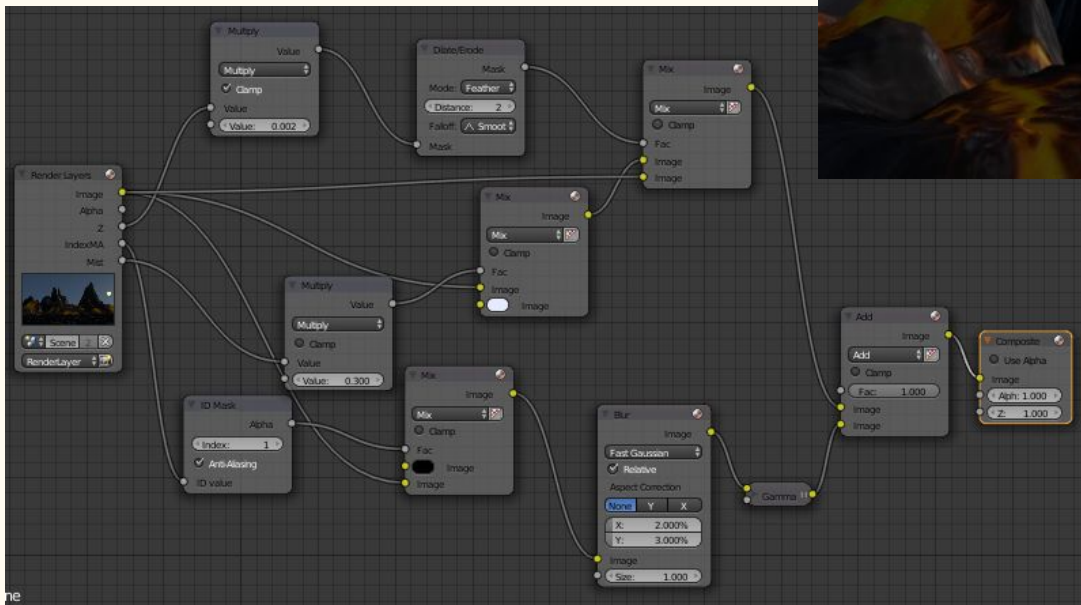
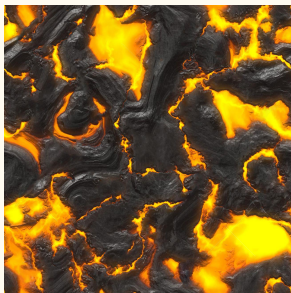
Animation





# Blender: Landscape

1. Modelling in Cycles Render engine
2. Texturing

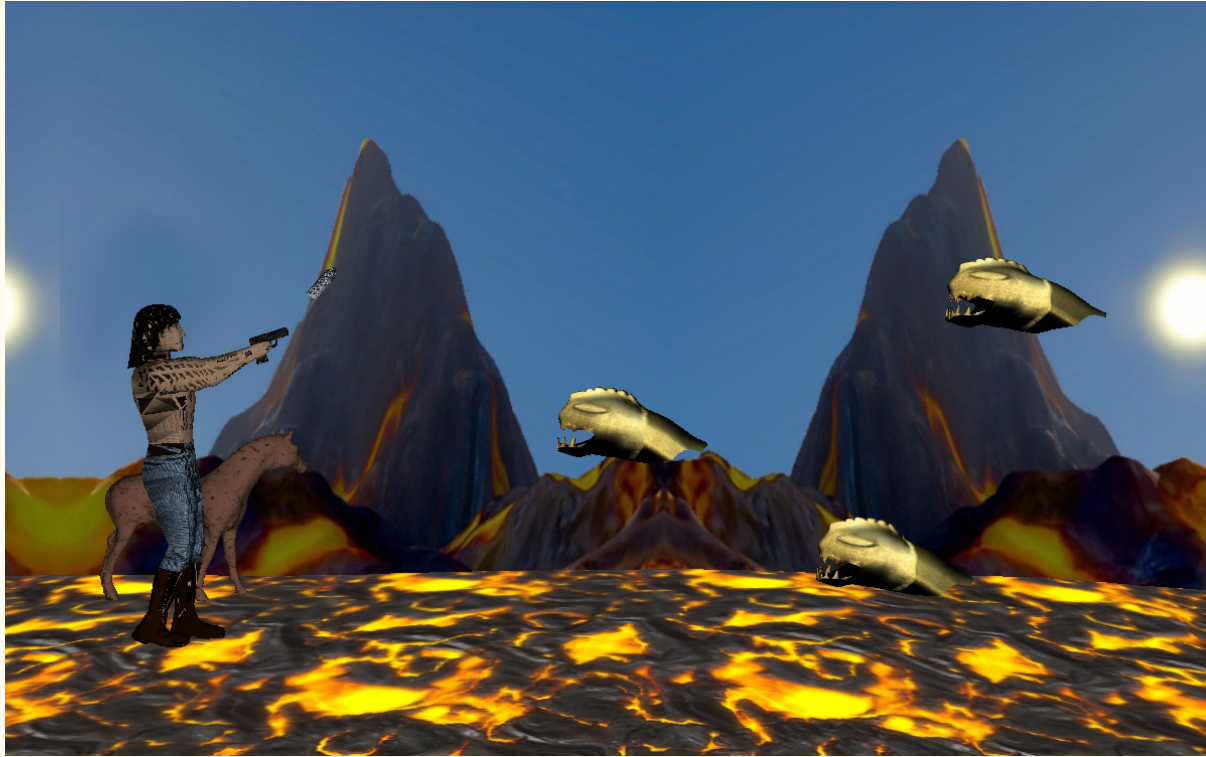


## 3. Effects: Compositing Nodes

- In depth mist
- Blur filter for the sun
- Mask to control effects

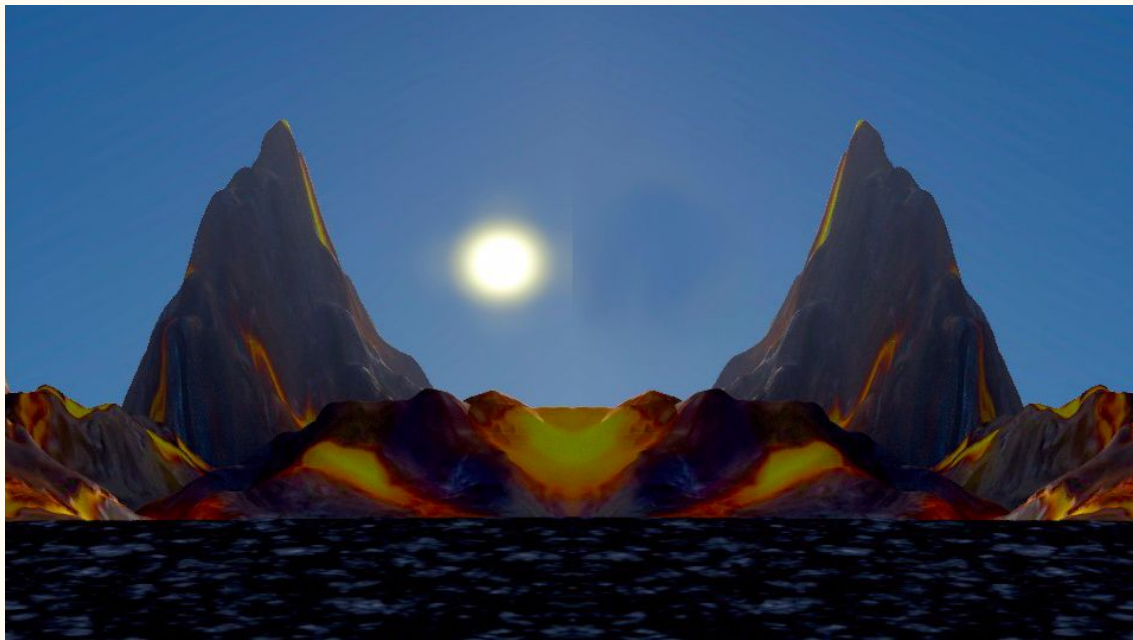
# Hero & Bullet & Horse

1. Animation
2. Texture mapping
3. Transformation matrix - rotation / translation / scale
4. Switch texture each frame
5. 1 light position
6. Mesh simplification - half edge collapse



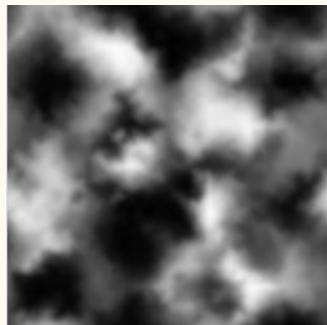
# Background

## 1. Moving background texture



# Background

1. Textured 3D terrain



2. Infinite Terrain



# Enemy & Boss

1. Texture mapping
2. Phong shading
3. Animation