

OpenGL 3D Model

Installation Guide:

Step 1: Open up the dist folder on the github

Step 2: If you do not have Microsoft Visual C++ 2015 installed

- Click on vc_redist.x64 and follow the steps to install it

Step 3: Click on the 3D-Model-Generator.exe to run the application

User Manual

Main Terminal:

- start: Runs the main program
- quit: Quits out of the terminal

Editor:

Selection:

- Click on a push button to select the side of the cube you would like to manipulate.
- Bottom right push button is to select the whole entire cube to manipulate with tools.
- Load Image will open a file browser to choose an image for that side of the cube.

Projection Drop Down Menu:

- None: Displays no extra projects to compare the sides with,
- Left & Right: Displays projection of the left and right images to compare the top and bottom with them.
- Top & Bottom: Displays Projection of the top and bottom images to compare the left, right, and back images with.

Tools:

- Scroll Wheel: Zooms in and out
- Hotkey 1. Pointer: Basic pointer
- Hotkey 2: Rulers:
 - Left Click: Adds Ruler Point
 - Right Click: Remove Ruler Point
 - Left Click Drag: Creates two points and creates a line in between them.
- Hotkey 3: Eyedropper Tool (Currently not working)
- Hotkey 4: Mover:
 - Left Click Drag: Moves the image around
 - Right Click: Rotates the image
- Hotkey 0: Change Ruler Color
- Hotkey -: Set output image color (Currently not working)
- Hotkey =: Set nullify color (Currently not working)

Cube Preview:

- Slider: Zooms image in and out

- Left Circle: Rotates the Y-axis of the cube
- Middle Circle: Rotates the X-axis of the cube
- Right Circle: Rotates the Z-axis of the cube

Other Buttons:

- Update:
 - Will open up once all six images are loaded in
 - Will update the current cube images and save them to a temporary directory
- Weight: Change the weight of the selected side (Currently Not Working)
- Preview:
 - Will open up once the update button is pressed
 - Will open up the 3D Model Preview

Preview Window:

- Preview: Creates the 3D Model
- Export: Exports a .obj of the 3D model to location of user choice
- Resolution Split: Set the resolution of the 3D model
- Distance: Sets the distance between the vertical levels.
- Bias Multiplier: Trims less defined bits to help smoothing