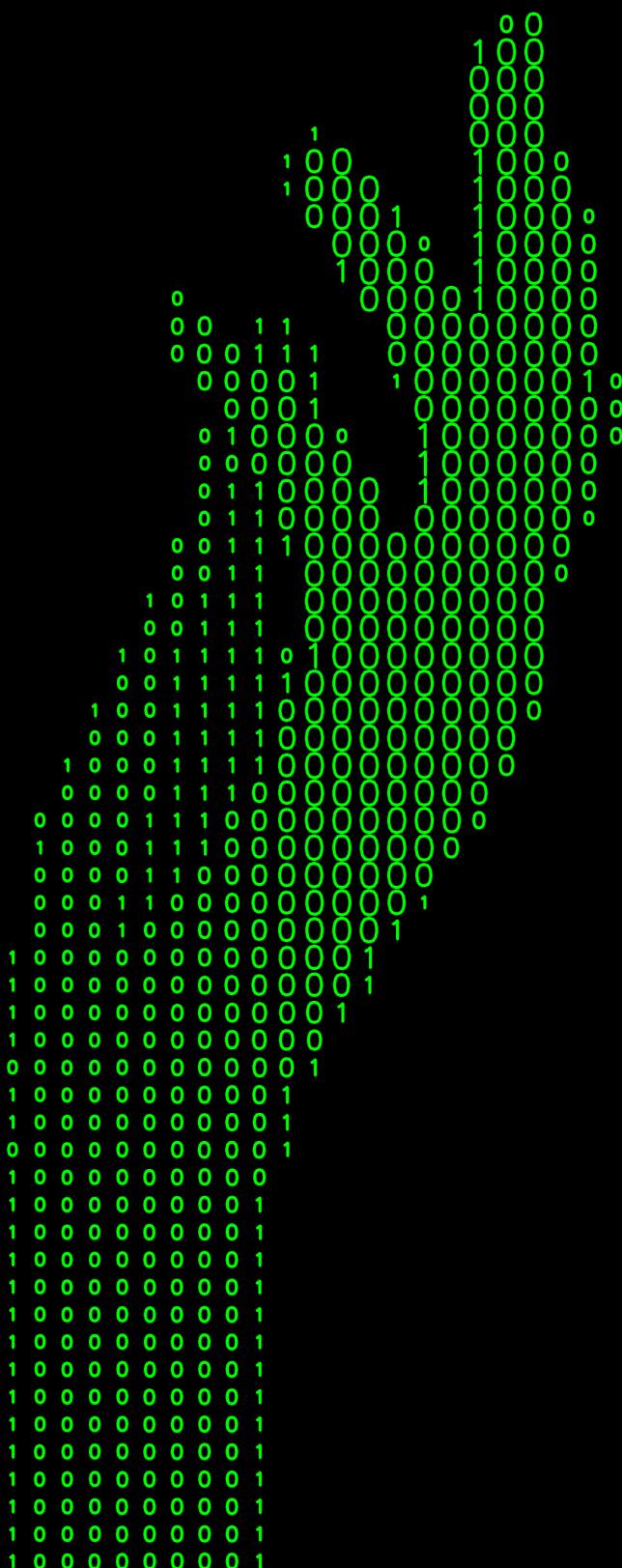


Depth-Aware Binary Rendering Tool_

A Python project by Afonso Veríssimo



Project Overview

This tool is a Python-based system that **transforms video and image input into a binary-style rendering**, with optional complementary audio generation.

GitHub Link:

<https://github.com/afonsoverissimo/Binary-Style-Rendering-Tool.git>



Input to Output

This tool receives 3 inputs (image or video): ***Alpha***, ***Depth*** and ***Original***, combining them into a final stylized render.



Alpha



Depth



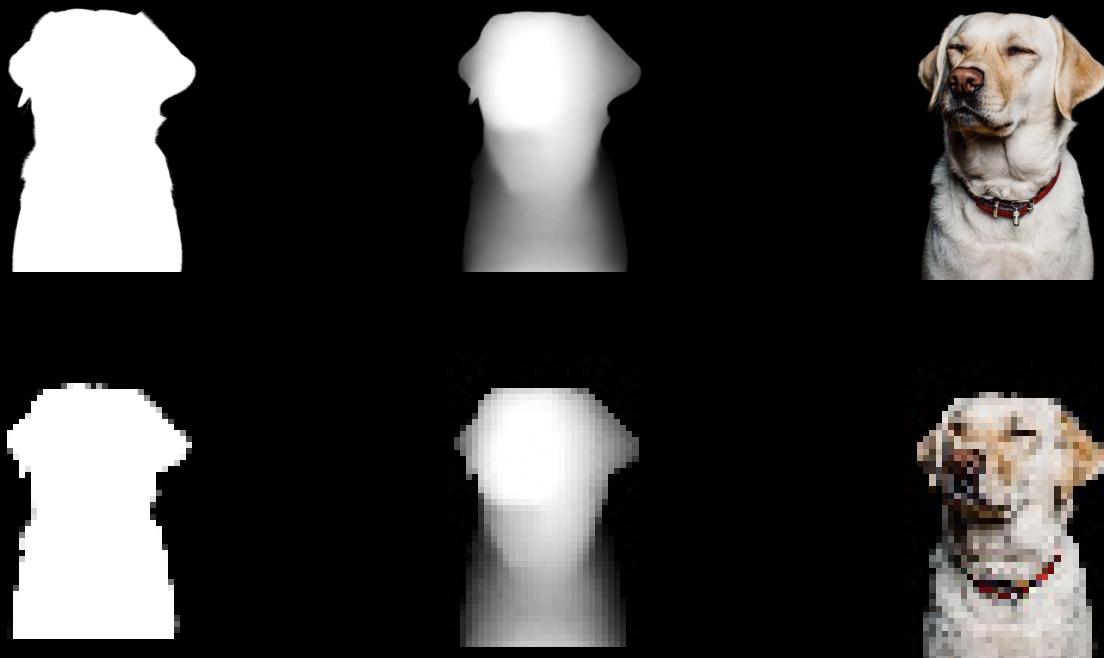
Original



Final Render

Process breakdown

Step 1: Pixelate Frames

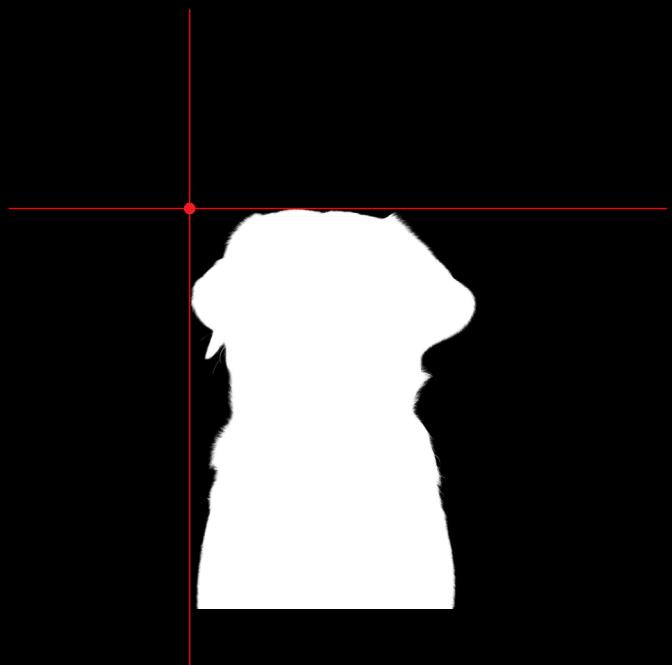


Step 2: Get bright and dark areas (0=dark, 1=bright)



Process breakdown

Step 3: Get subject position



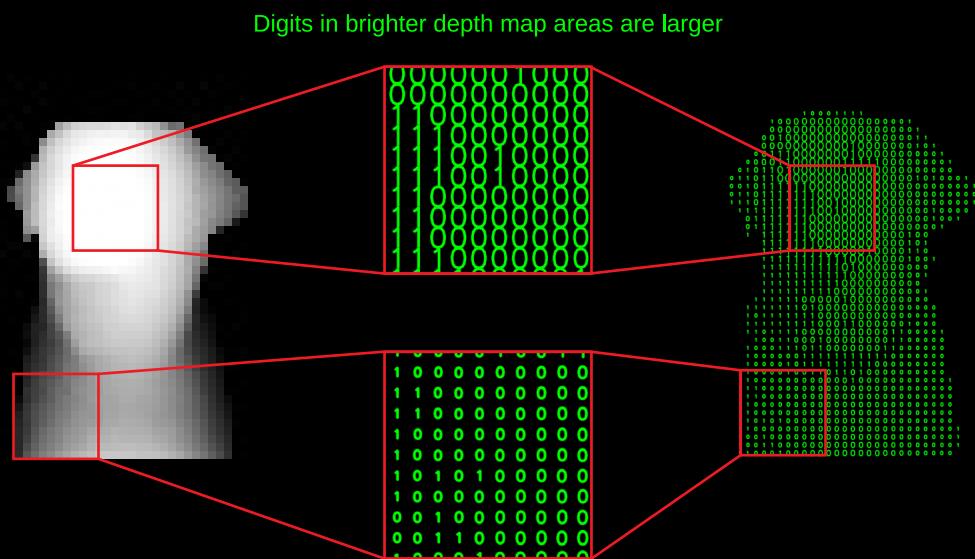
Step 4: Render 0's and 1's in the correct position



Features

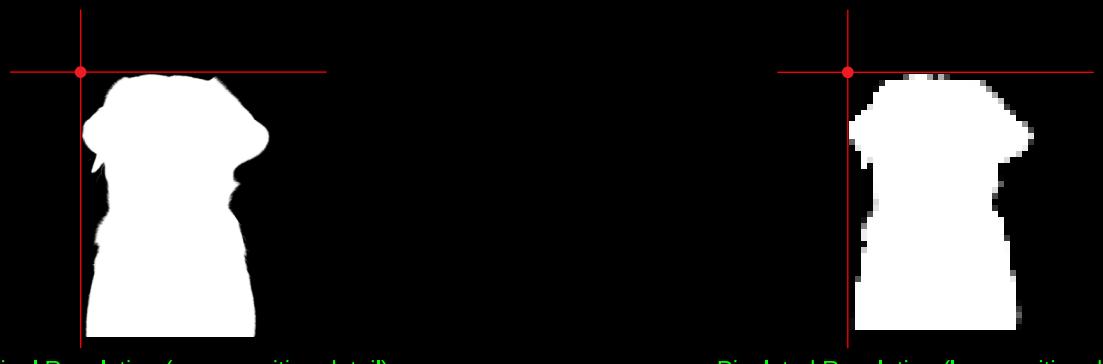
Depth-Awareness

The program takes data from the Depth input and renders each digit accordingly, making closer areas appear larger.



Smooth Subject Motion

The program uses the full resolution Alpha to get the subject's position for smoother motion in video rendering.



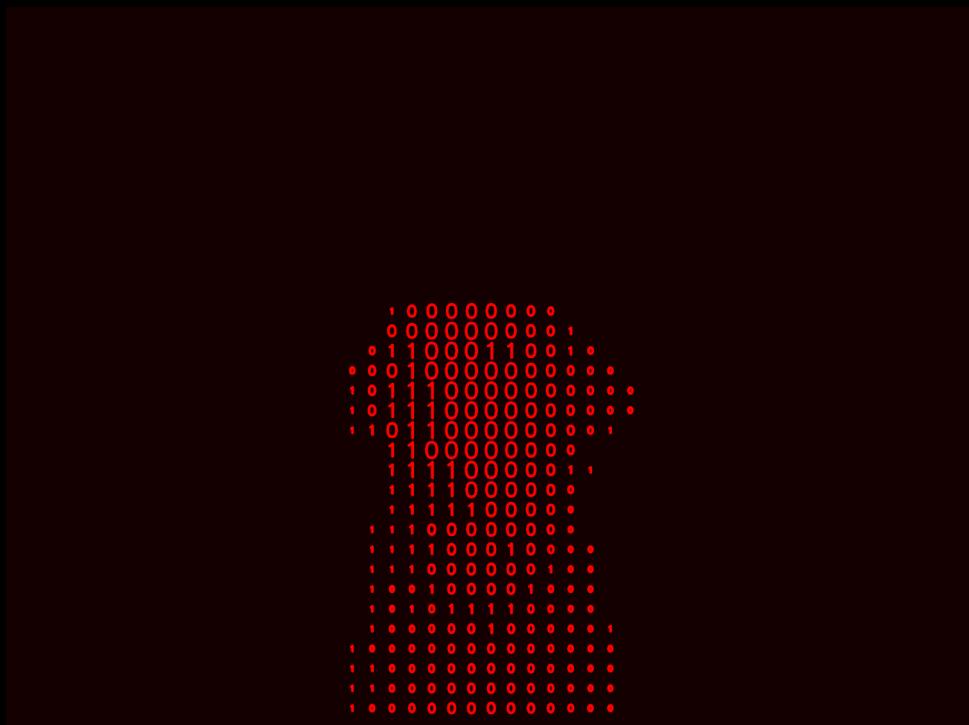
Original Resolution (more position detail)

Pixelated Resolution (less position detail)

Features

Configurable Parameters

Resize factor, Brightness Threshold, Max Font Scale, Min Font Scale, Font Thickness, Font Color, and more.



Resize factor = 80, Max Font Scale = 3, Min Font Scale = 1, Font Thickness = 10, Font Color = Red



Resize factor = 40, Max Font Scale = 1.8, Min Font Scale = 0.8, Font Thickness = 3, Font Color = Green

Use Case

GFX for a Short Film proof of concept

