Hernaldo Jesús Henríquez Núñez

Portfolio

I'm a Computer Scientist who loves programming. My areas of interest are Computer Graphics and Animation, I have experience in research with Machine Learning and Computer Vision, and professional experience with Web and Mobile apps.

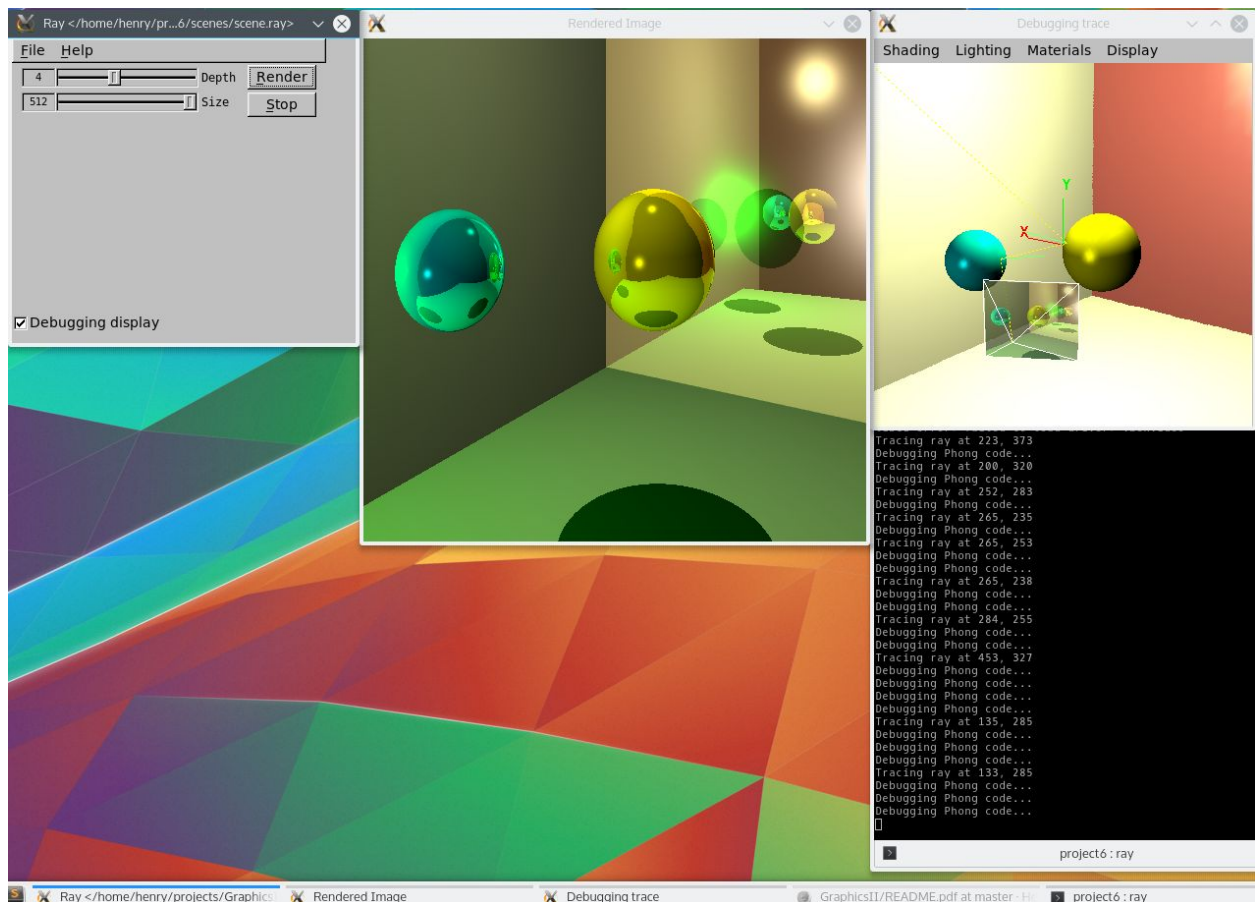## Image Object Classification - January to March 2016

Back at PUC, my home university, I won a Short-Term Research Scholarship to travel to Texas A&M University for about 2 months. I worked on research for agriculture under the Department of Computer Science and Engineering, advised by prof. Bruce Gooch. I created an image classification program from scratch with Python and OpenCV and using the libraries numpy, scipy and matplotlib. The model had an accuracy of 80% with 5 classes and about 30 testing images per class.

The repository has 15 stars and 9 forks, you can see it in:
https://github.com/HenrYxZ/object-classification

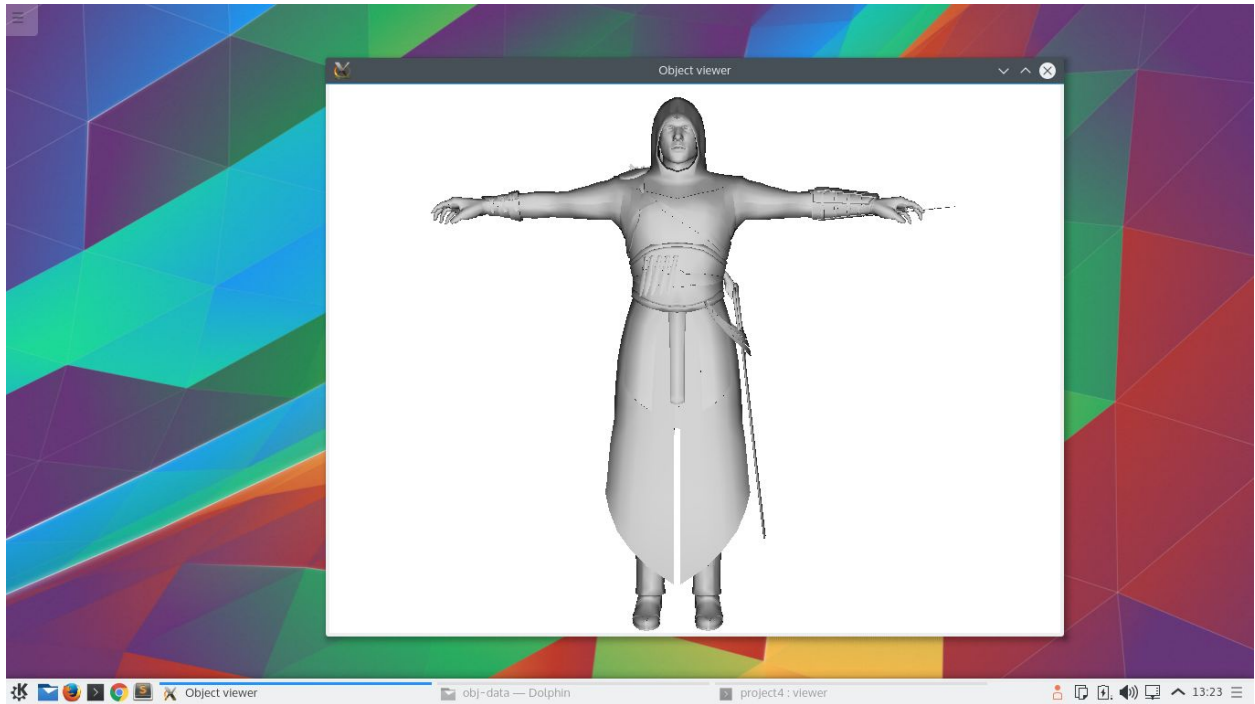A blog of weekly reports is here: http://aggiecv.blogspot.com/

C++ Raytracer - April 2013

For a computer graphics class we had to implement a raytracer in groups of 3 people. The image shows the program develop by us. We were given a skeleton program which included the interface and the generation of windows and debugging window with the generation of lines for the rays and the camera. We only had to implement the Phong lighting model, texture mapping and the calculations for reflections and refractions. We had 2 weeks to do that. The code is in github:

https://github.com/HenrYxZ/GraphicsII/tree/master/project6

C++ Object Viewer for OBJ format - March 2013

For the same computer graphics class we had to implement an object viewer program using arch ball rotation and zoom in and out. We did it in a group of 3 people. The code for that is here: https://github.com/HenrYxZ/GraphicsII/tree/master/project4, it uses OpenGL and C++.

Life Drawing - Summer 2019

In this class at Texas A&M University we explored the concepts of motion and weight, went through human anatomy and explored compositing and lighting. This drawings were made by me and it was my first drawing and art class ever.