
Py3D Scene Editor Documentation

Release

Ricardo Jorge Vieira Ribeiro

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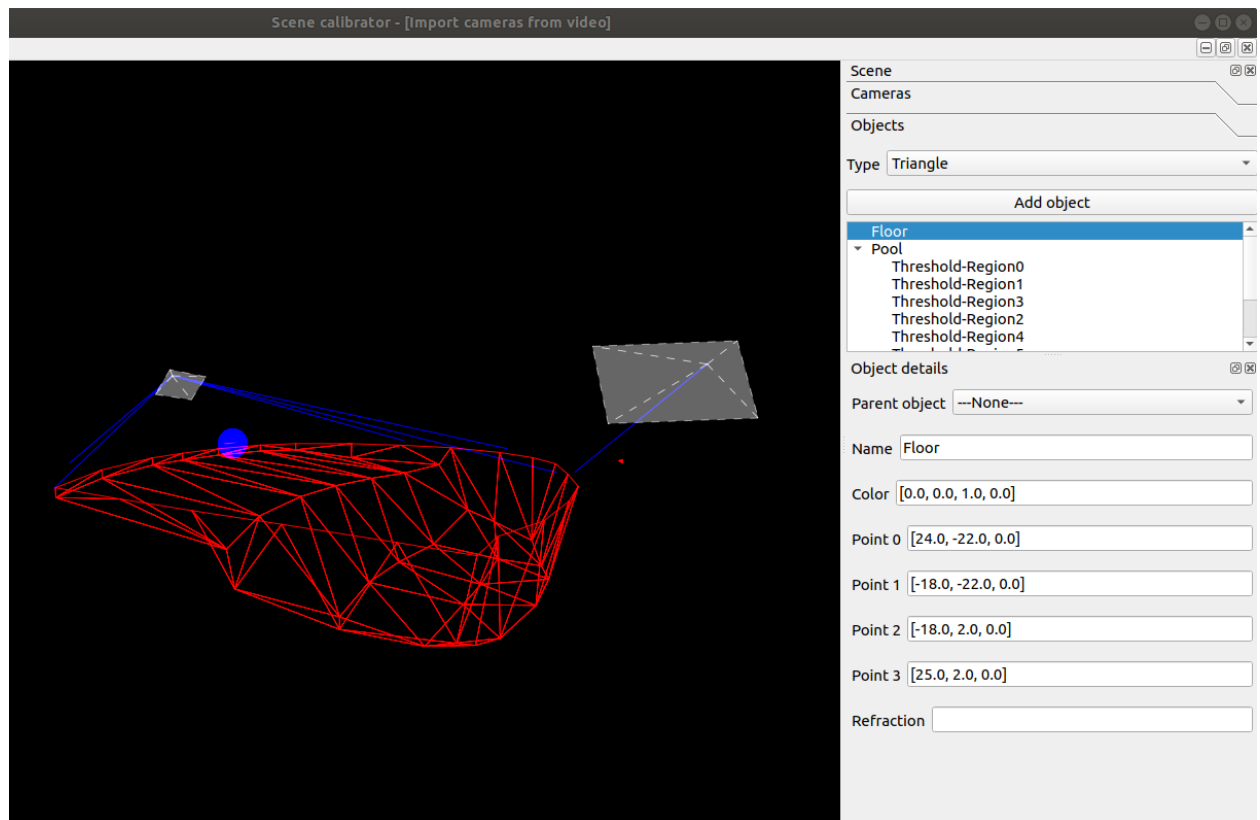
The application was developed to design 3D scenes for the the Python 3D Engine.

This application together with the Python 3D Engine can be used to help computer vision algorithms extract 3D information from 2D video.

CHAPTER 1

Functionalities

- Add and manipulate cameras properties in a 3D scene.
- Add 3D solids to a scene.
- Trace pixels rays from cameras and detect collisions with objects in the scene.
- View a 3D scene from a virtual camera prespective.
- Export the scene to a OBJ format file and open it in a external software.



Ricardo Ribeiro	from the Champalimaud Scientific Software Platform ri- cardo.ribeiro@research.fchampalimaud.org
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2.1 Install & run

- Download & install [Anaconda](#) or [Miniconda](#).
- Download and uncompress the [py3dsceneeditor](#) repository.
- Open the terminal and go to the previous uncompressed directory.
- Execute in the terminal the next command to install the Anaconda/Miniconda environment.

```
conda env create -f environment-ubuntu17.yml
```

- Activate the environment by executing the command:

```
source activate py3dengine-environment
```

- Execute in the terminal the next command to update the code:

```
python install.py
```

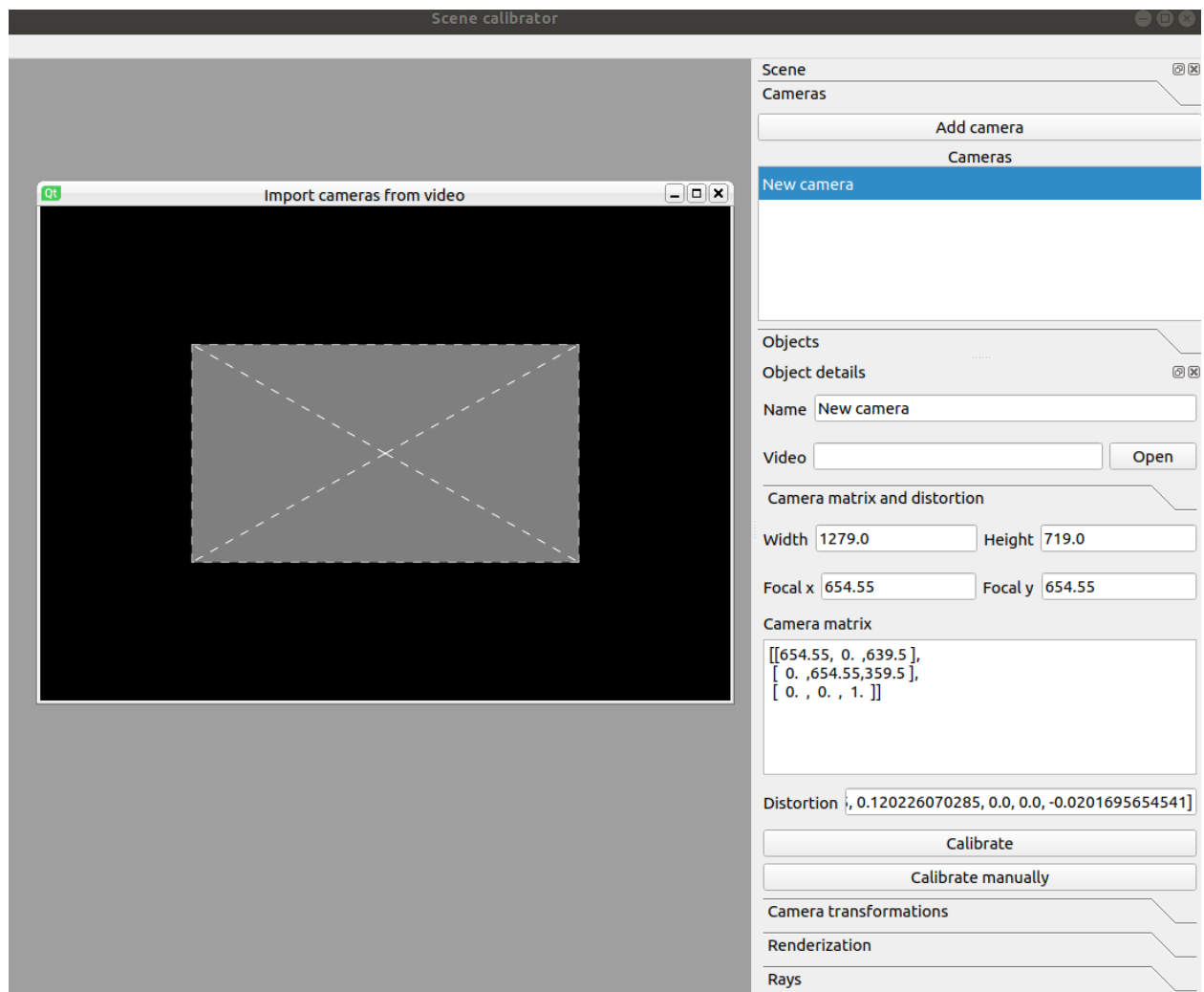
- Execute in the terminal the next command open the application:

```
python -m py3DSceneEditor
```

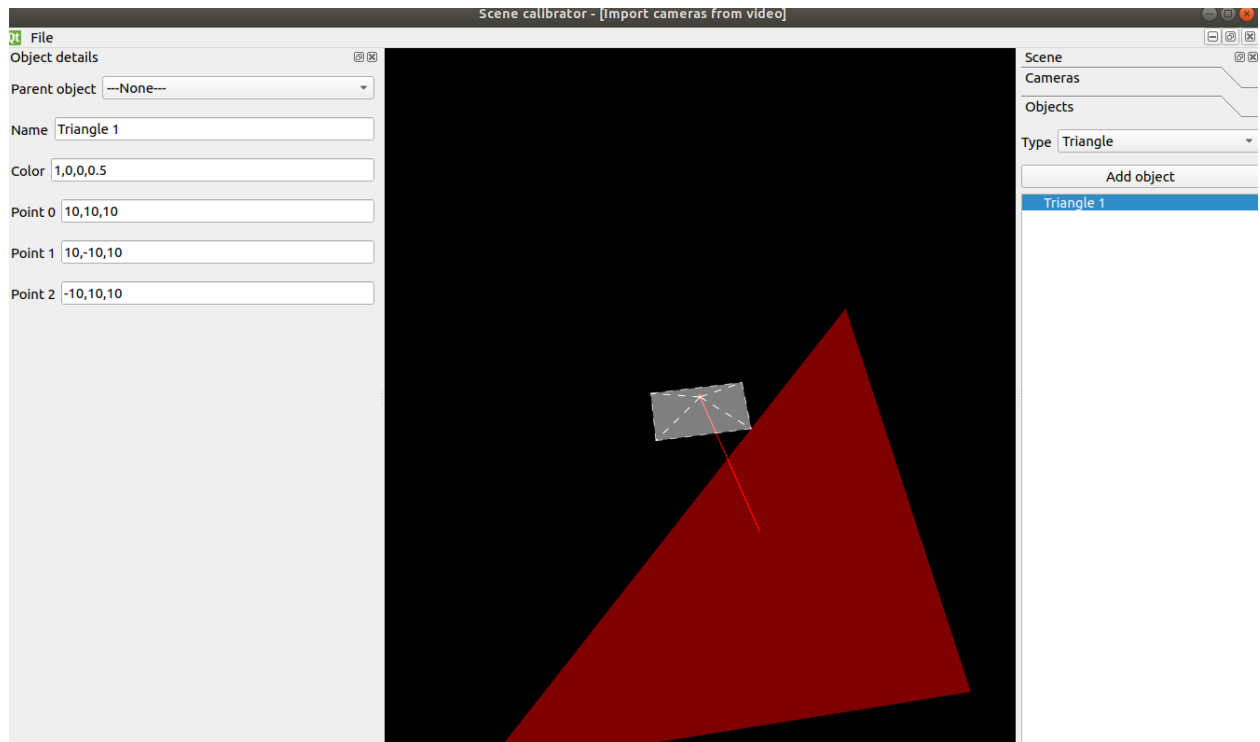
2.2 My first 3D scene

Download the example: [material file](#), [object file](#)

Add the first camera and set the camera matrix.



Add the first triangle and set the color, point 1, point 2 and point 3.



Save the scene using the main menu option: **Save scene as**.

2.3 Getting started