# 空间open3d：

import open3d as o3d

## 读写io：

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| read\_point\_cloud(ply) | 加载点云 |  |
| read\_triangle\_mesh(ply) | 加载网格 |  |

## 可视化visualization：

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| --- | --- |
| draw\_geometries(geometries) | 绘制 |

# 3DGS光栅化diff\_gaussian\_rasterization：

<https://github.com/graphdeco-inria/diff-gaussian-rasterization/tree/3dgs_accel>

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| --- | --- | --- |
| **GaussianRasterizationSettings** | | 渲染配置 **(结构体)** |
| **实例属性** | **tanfovx / tanfovy** | **tan(0.5 \* FoV)** |
| **campos** | **相机位置** |
| **debug** | **???** |
| **pixel\_weights** | **像素权重** |

|  |  |  |
| --- | --- | --- |
| **GaussianRasterizer(setting)** | | 光栅化器 **(nn.Module)** |
| **实例方法** | **forward(**  **means3D,**  **means2D, # 输出矩阵**  **opacities,**  **dc, shs, # C的一阶、其它参数**  **colors\_precomp, # None时由C计算**  **scales, rotations,**  **cov3D\_precomp, # None时由S、R计算**  **)** | 光栅化 |