

# 基于相机的人工智能通用三维重建

## Camera-based AI Universal 3D Reconstruction

### 利用人工智能实时重建三维表面

Real-time 3D surface reconstruction with AI



立體圖像輸入  
Stereo Images Input



一个模型适用于不同工作距离  
和相机距离  
One model for different working  
distances and camera distances



不限物体材质  
Unlimited Object Material



无需对新物品进行训练  
No Need to Train on New  
Object

| 工作距离<br>Working Distance | 黑和幼细<br>Black and Thin |  | 反光<br>Reflective | 透明<br>Transparent |
|--------------------------|------------------------|--|------------------|-------------------|
| 实物图<br>Image             |                        |  |                  |                   |
| RealSense                |                        |  |                  |                   |
| 应科院<br>ASTRI             |                        |  |                  |                   |

### 利用人工智能算法从相机输入进行三维模型重建，实现无材质限制的重建

Utilizes AI algorithms to reconstruct 3D models from camera input, enabling material-agnostic reconstruction

| 三维物体重建<br>3D Object Reconstruction |  | 透明物品点云重建<br>Transparent Objects Point<br>Cloud Reconstruction |  | 可编辑视角的场景重建<br>Scene Reconstruction with Editable Viewpoints |  |
|------------------------------------|--|---------------------------------------------------------------|--|-------------------------------------------------------------|--|
|                                    |  |                                                               |  |                                                             |  |



数十分钟内完成三维重建模  
型训练  
Complete 3D Reconstruction  
training in minutes



不限物体材质  
Unlimited Object  
Material

应用领域: 拾取与放置、室内三维感知、三维扫描、虚拟导览、建筑信息模型 (BIM) 等  
Application Area: Pick & Place, In door 3D Sensing, 3D Scanning, Virtual Tour, BIM, etc.