

用于工业机器人的三维随机堆叠取放软件 Random Bin Picking Software for Industrial Robot

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融合深度学习与三维点云处理的识别定位软件

Intelligent 3D object recognition software that integrates deep learning and 3D point cloud processing

核心技术和平台优势 Core Technologies & Advantages

❖ 深度学习 Deep Learning

运用深度学习，提取物件的特征，训练合适的查找模型，免去调整参数

Extract object features by deep learning to train an appropriate model without the need to parameter tuning.

❖ 虚拟数据引擎 Data Generation engine

透过模拟引擎生成深度学习的数据，无需人工标注

Generate artificial data through 3D engine. No Manual Labeling.

❖ 简单导入 Model Registration Software

模型导入软件集成深度学习与虚拟数据生成，一键完成从CAD到识别模型的生成

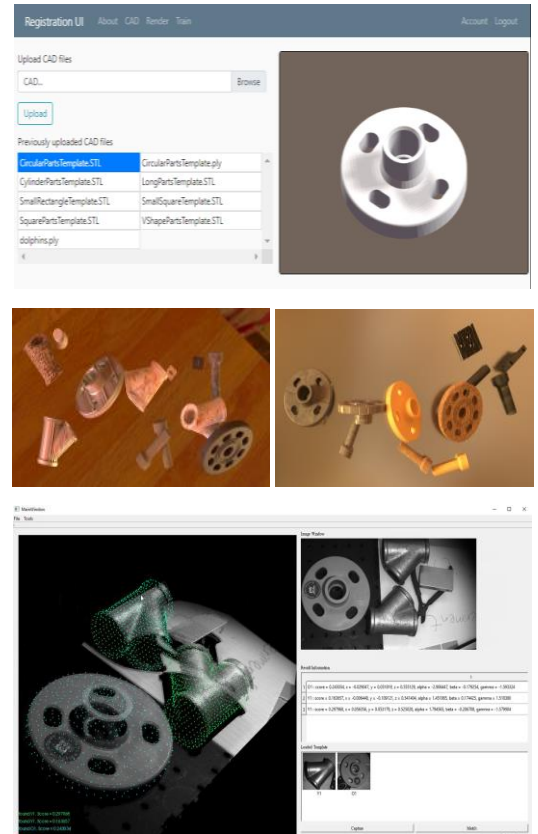
Complete pipeline from synthetic training data generation to deep learning. Easy 3D recognition model generation from CAD.

❖ GPU点云算法

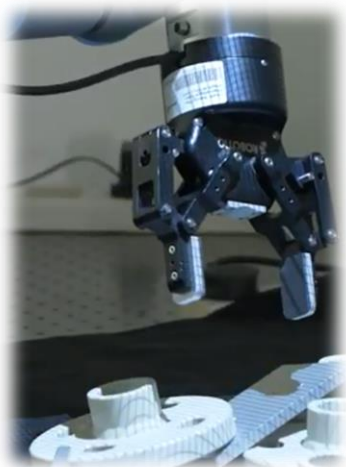
GPU accelerated point cloud processing algorithm

识别软件运用GPU加速点云处理算法于物体姿态定位，同时保证速度与精度要求

Apply GPU accelerated point cloud processing on object recognition to ensure speed and accuracy.



应用场景和功能 Application Scenarios & Functions



机器人自动抓取 Robot pick and place

应用于自动工厂，机器人自动在测试机台上落物料。

Robot auto load and unload material to/from testing equipment in smart auto factory.

3D 缺陷检测 3D defect detection

针对随机摆放的物件，定位物件的三维姿态，规划机器人检测路径，有效进行3D检测。

Auto 3D align randomly place object for effective 3D defect detection.

