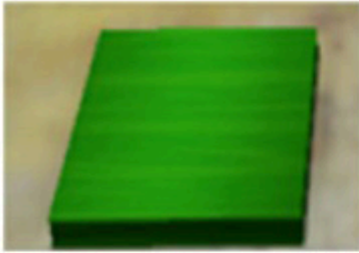


USARTruth



- x-location
- y-location
- z-location
- rotation
- dimensions

USARSim simulation



state recognition algorithms

Description: PartiallyInStateRelation

Equivalent classes +

● (Z-Plus
and (Z-NTPP
or Z-NTPPi
or Z-PO
or Z-TPP
or Z-TPPi))
and (X-NTPP
or X-NTPPi
or X-TPP
or X-TPPi)
and (Y-NTPP
or Y-NTPPi
or Y-TPP
or Y-TPPi)

kitting ontology

ActionPredicate

- Endeffector-location-endeffectholder
- Endeffector-location-robot
- Endeffector-type-kit
- Endeffector-type-kittray
- Endeffector-type-part
- Endeffectorchangingstation-contains-endeffectholder
- Endeffectorholder-empty
- Endeffectorholder-holds-endeffect
- Endeffectorholder-location
- Found-part
- Kit-location-lbwk
- Kit-location-robot
- Kit-location-worktable
- Kittray-location-lbwekt
- Kittray-location-robot
- Kittray-location-worktable
- Lbwekt-not-empty
- Lbwk-not-full
- On-worktable-kit
- On-worktable-kittray
- Origin-part
- Part-location-kit
- Part-location-partstray
- Part-location-robot
- Part-not-searched
- Partstray-not-empty
- Robot-empty
- Robot-holds-kit
- Robot-holds-kittray
- Robot-holds-part
- Robot-with-endeffect
- Robot-with-no-endeffect
- Worktable-empty

state relation output

RCC8-Checker

Capture OFF

State	if under effector	if A on Table	if A in RB Tray	if B on Table	if B in RB Tray	if C on Table	if C in RB Tray
1	0	1	0	1	0	1	0
2	1	0	0	1	0	1	0
3	1	1	0	1	0	1	0

----- State : 3 -----
On top with contact(PartA_1,StaticMeshActor_0)
Under with contact(StaticMeshActor_0,PartA_1)

----- State : 2 -----
On top with contact(PartA_0,StaticMeshActor_0)
Under with contact(StaticMeshActor_0,PartA_0)

----- State : 1 -----
On top with contact(WCvtTray_0,StaticMeshActor_0)
On top with contact(PartC_0,StaticMeshActor_0)
On top with contact(PartB_0,StaticMeshActor_0)
On top with contact(PartA_0,StaticMeshActor_0)
Under with contact(StaticMeshActor_0,WCVTray_0)
Under with contact(StaticMeshActor_0,PartC_0)
Under with contact(StaticMeshActor_0,PartB_0)
Under with contact(StaticMeshActor_0,PartA_0)