

AILA

- Towards Autonomous Mobile Manipulation -

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AILA







Research Areas



- Scene/Object recognition and pose estimation
- One and two-arm manipulation (trajectory) planning
- Force based grasping/control
- Real-time motion control
- RFID-based task planning
- ROS based Software architecture :
 - interprocess communication
 - task coordination and execution



Vision



 Object Recognition based on SIFT Feature Matching



Marker and Shelf Recognition



3D Object's Pose Estimation





Dual-Arm Trajectory Planning



Planning including 4 torso DOFs (total of 18 DOFs)



