Future Developments in MoveIt!

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Grasping Pipeline
Application - Grasping

- Collision Map Generation
- Scene Interpreter
- Object Model Registration
- 3D Perception
- Grasp Planning for unknown objects
- Grasp Planning for known objects
- Grasp Selection
- Motion Planning
- Grasp Execution
- Tactile Feedback
- Object Model Database
- Grasp Execution

Willow Garage
Arm Navigation/Grasping Pipeline

- A set of serial operations
  - not efficient
  - need to work through whole pipeline before rejecting a particular grasp
  - slow
MoveIt!

- “Manipulation Stages”