Baxter Videos

Research Robots at UHCL 0:29

https://youtu.be/uWT1Z53nSVE

Turtlebot, Bebop, Baxter plays golf

Meet Baxter Good News and Other News Rethink is no more but Sawyer lives on.

MANIPULATION

VISUAL SERVOING Golf 3:55

Baxter Research Robot Visual Servoing Pick & Place Demonstration 3:55

https://www.youtube.com/watch?v=d-a82DYlaIE

ADVANTAGES OF TWO ARMS

Baxter Research Robot Solves Rubik's Cube 4:40

https://www.youtube.com/watch?v=vF9usYszChU

Human touch makes robots smarter: On Learning Context-Driven User Preferences 1:39

https://www.youtube.com/watch?v=uLktpkd7ojA

SMACH. YMCA. VIDEOS.

Baxter Controlled through EEG

Baxter robot is controlled through an Emotiv EEG headset to move his two 7 DOF arms to form the letters of YMCA. 3:13

https://www.youtube.com/watch?v=RSYHQQoSIR8

YMCAStateMach_for_Sim.py.docx

Double Click OR PULL IT UP 6_1_PY

SMACH is a task-level architecture for rapidly creating complex robot behavior. At its core, SMACH is a ROS-independent Python library to build hierarchical state machines. SMACH is a new library that takes advantage of very old concepts in order to quickly create robust robot behavior with maintainable and modular code.

http://wiki.ros.org/smach

Lecture Ch6 Meet Baxter and Other "SAFE" robots

COBOTS. FAUNAC VIDEO

What's the difference between a COBOT and a ROBOT
2,096 view •Nov 15, 2019 2:36

https://www.youtube.com/watch?v=aRx20DTTQ2M&feature=youtu.be

We will see different control methods – position, velocity, force (or torque).

DOF VS 7 DOF

6 and 7 dof robot arms

https://www.youtube.com/watch?v=7u_UjMB8tJI&list=PLF968D1F05819D65E&index=2

POSE X, Y, Z, R, P, Y 6 DOF CAN BE A UNIQUE POSE – BUT OBSTACLE AVOIDANCE MAY BE LIMITED.

7 DOF HAS A REDUNCANCY BUT MORE FLEXIBILITY – THINK OF YOUR SHOULDER MOTION EXTENDING ARM PERPENDICULAR TO SHOLDER AXIS AS EXTRA DOF. **SEE OUR RESEARCH PAPER – 6_2_1.**

BIGGIES FOWARD KINEMATICS vs INVERSE KINEMATICS AARON ?

Forward and Inverse Kinematics Part 1 197,310 views •Aug 4, 2011 14:27

https://www.youtube.com/watch?v=VjsuBT4Npvk

Aaron solves an exam problem!

Intro2Robotics Lecture 9b: Solve Inverse Kinematics like a Pro! Aaron Becker 26:20

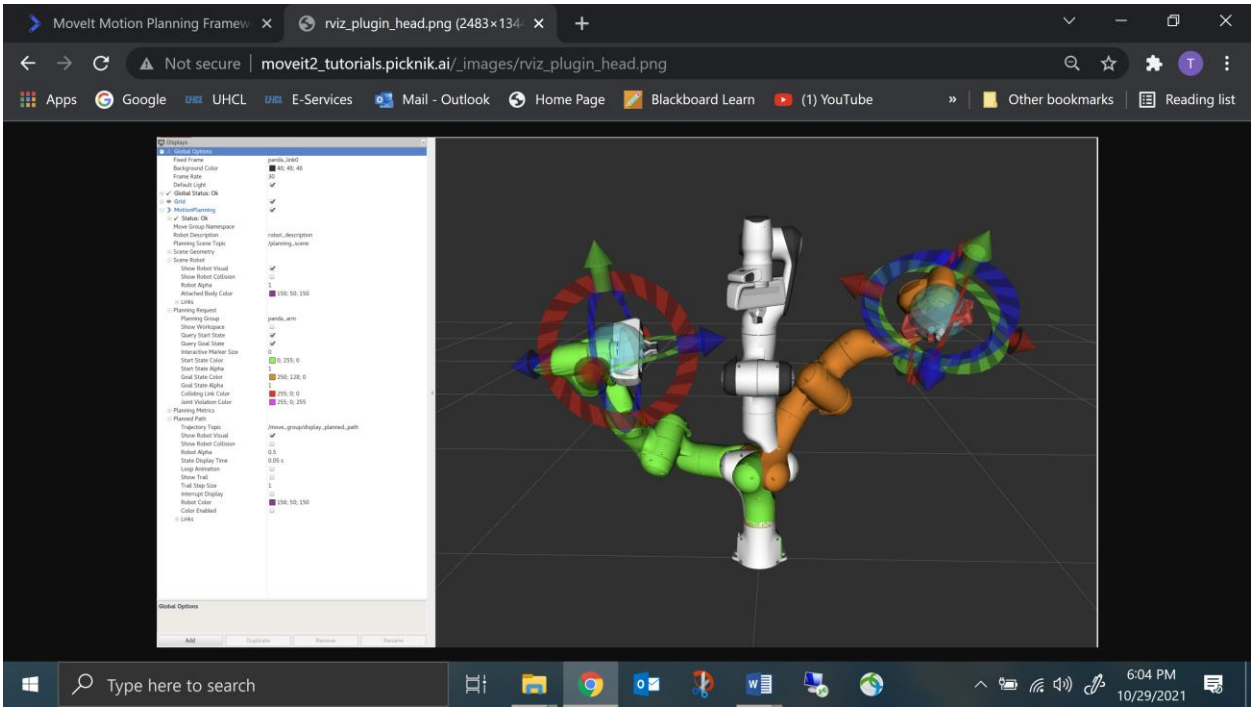
https://www.youtube.com/watch?v=vUwd-PHuYfQ

6_3 TRAJECTORY PLANNING MOVE IT

See the Robots page for a list of some of the robots that MoveIt! is being used with.

http://moveit.ros.org/

http://moveit2_tutorials.picknik.ai/



RICE **Kavraki Lab Computational Robotics, AI & Biomedicine Lab**

http://www.kavrakilab.org/

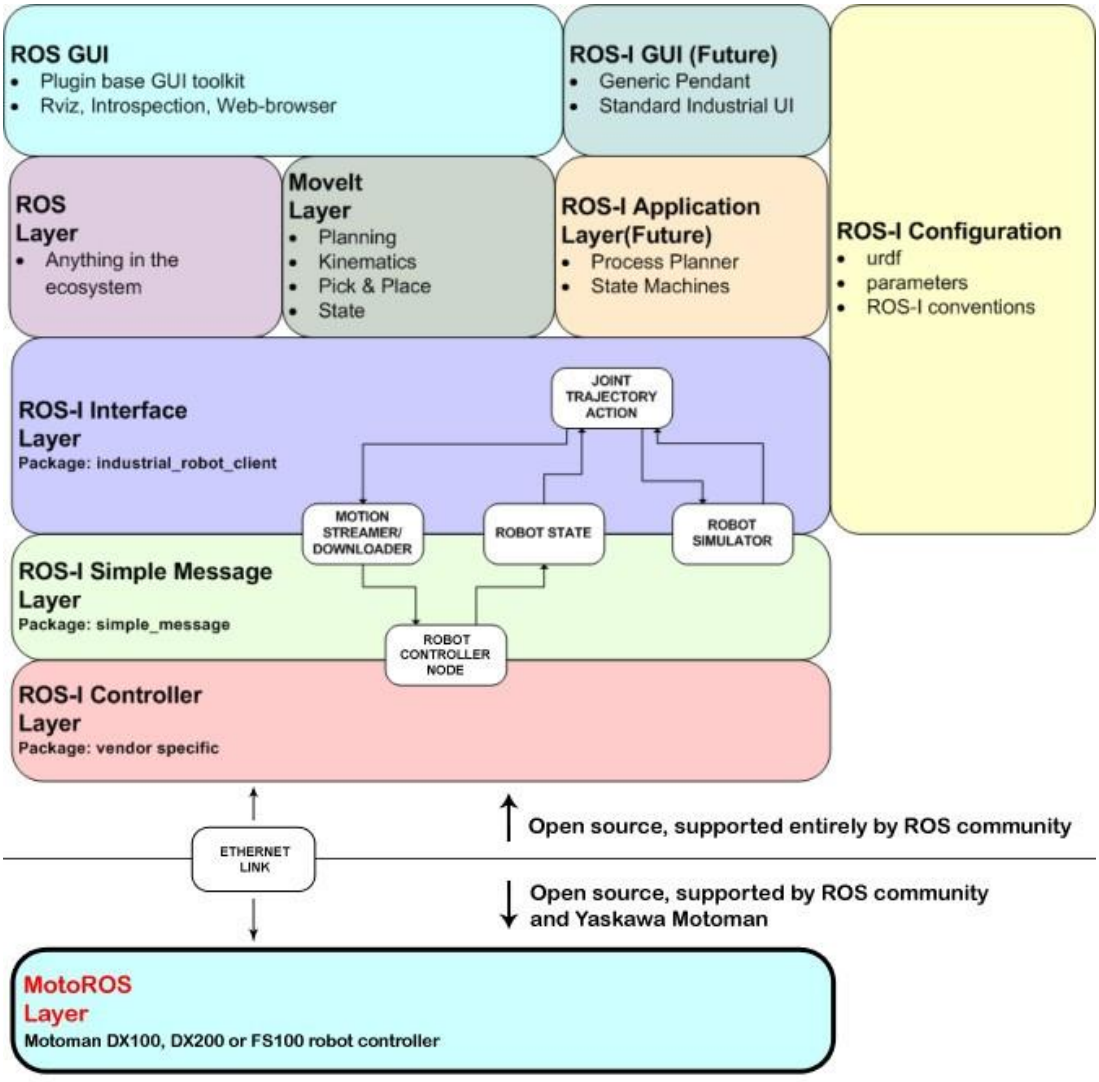
UNIVERSAL ROBOTS.

https://github.com/UniversalRobots/Universal_Robots_ROS_Driver

Universal Robots have become a dominant supplier of lightweight, robotic manipulators for industry, as well as for scientific research and education. The Robot Operating System (ROS) has

developed from a community-centered movement to a mature framework and quasi standard, providing a rich set of powerful tools for robot engineers and researchers.

---------- http://wiki.ros.org/motoman_driver



Creating a Dual-Arm System

http://wiki.ros.org/motoman_driver/Tutorials/Creating%20a%20Dual-Arm%20System

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