

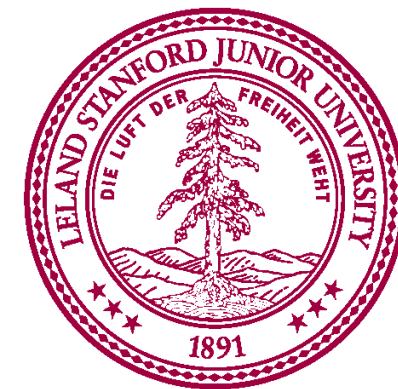
Renaissance of Robotic Grasping

机器人灵巧手抓取的复兴

Yu Sun / 孙宇

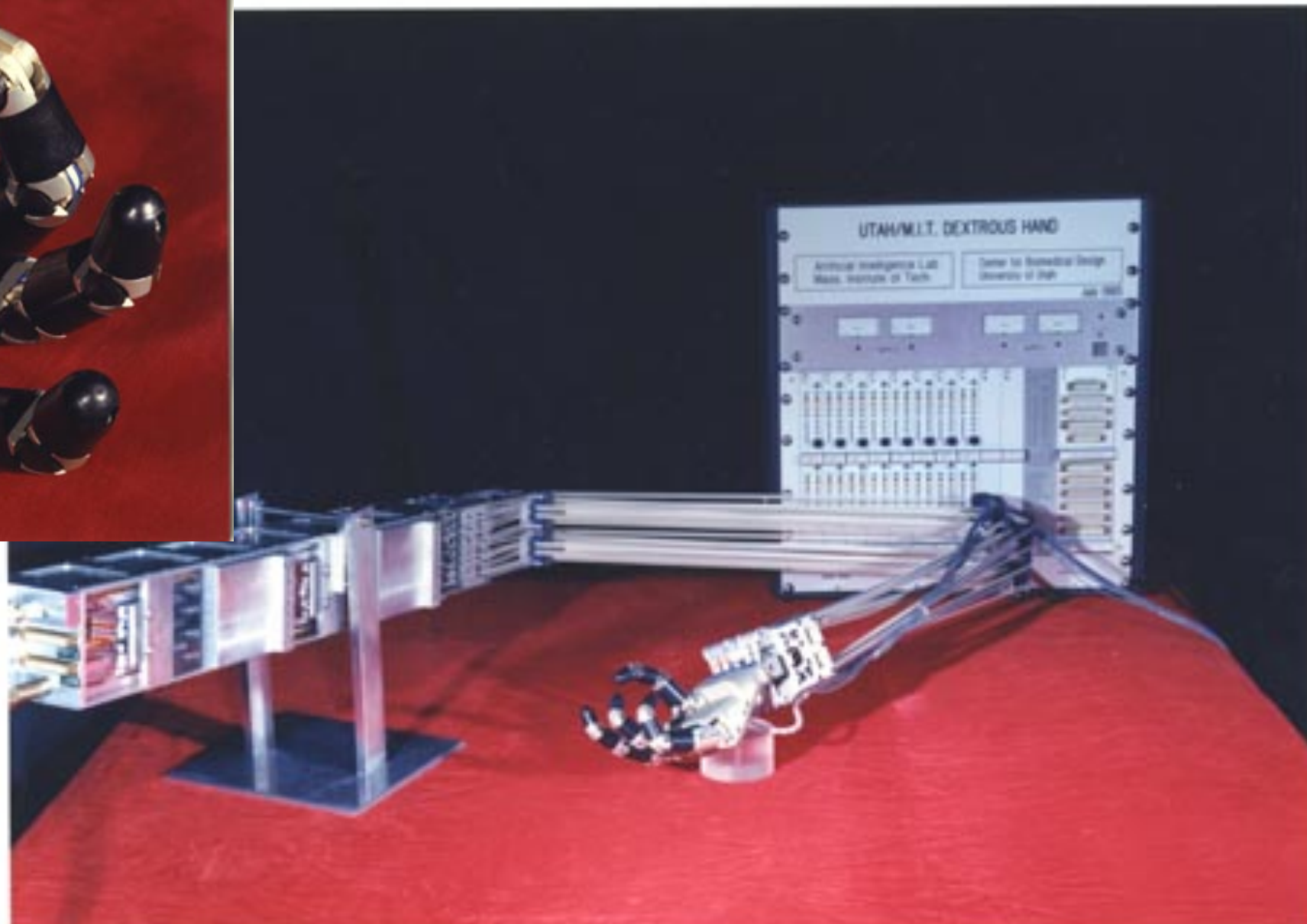
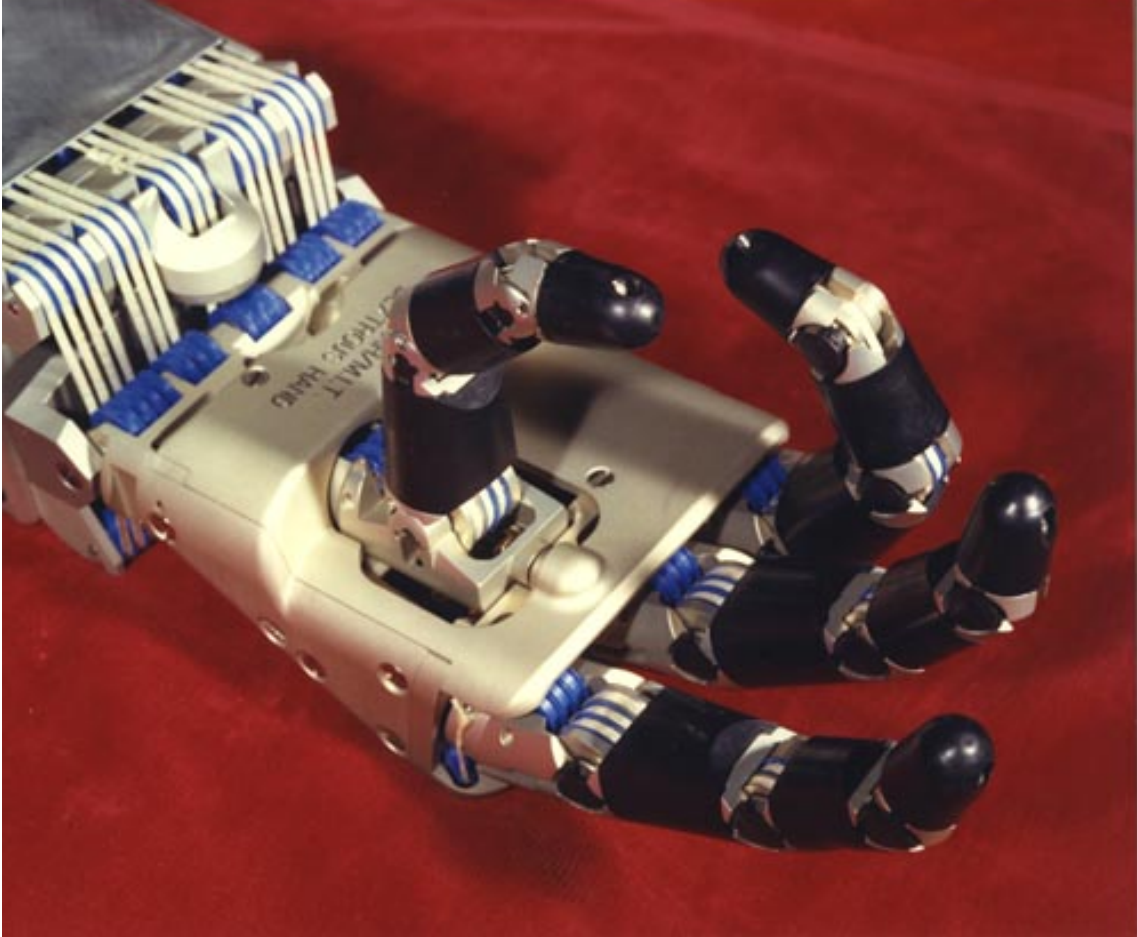
University of South Florida

Stanford University









Utah/MIT Hand, 1983



Stephen Jacobsen



John Hollerbach

Anthropomorphic Hands



DLR/HIT Hand



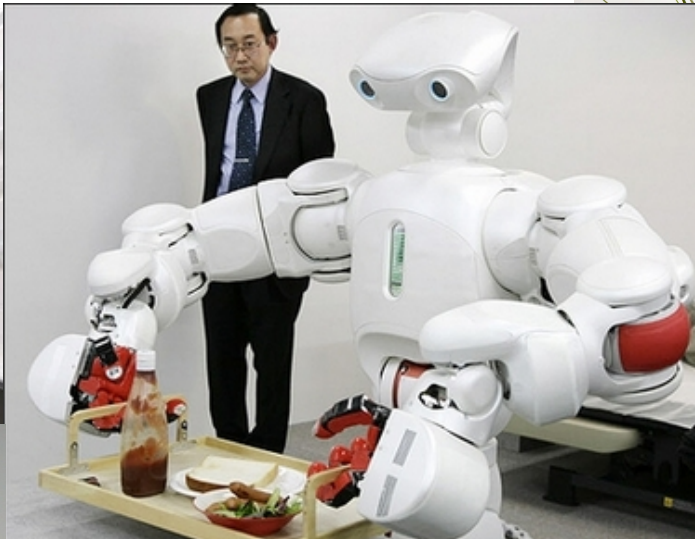
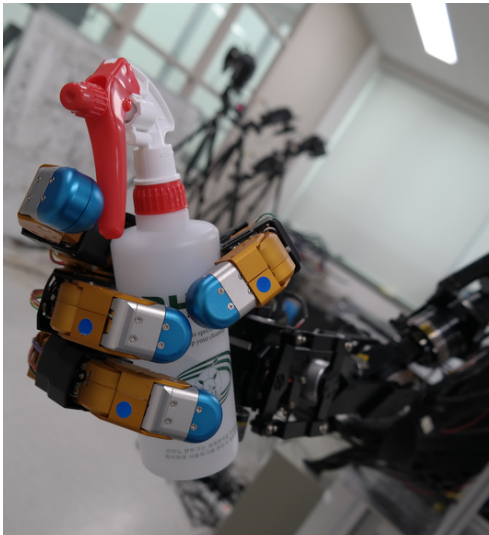
NASA Hand



Bionic Hand



Shadow Hand



Make your robot not just
cool, USEFUL.

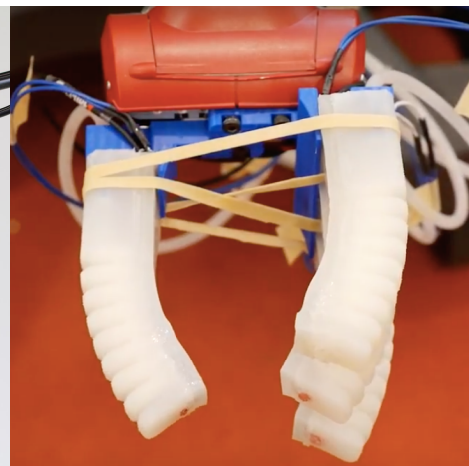
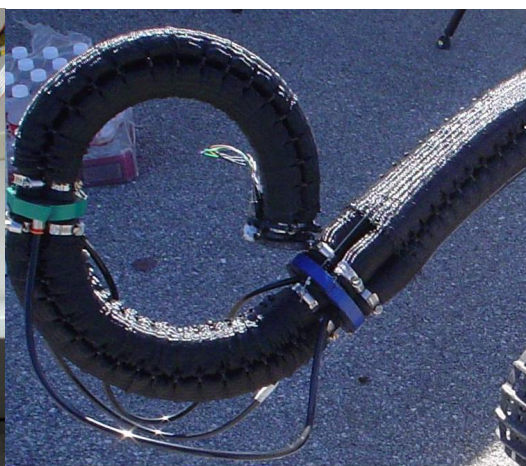
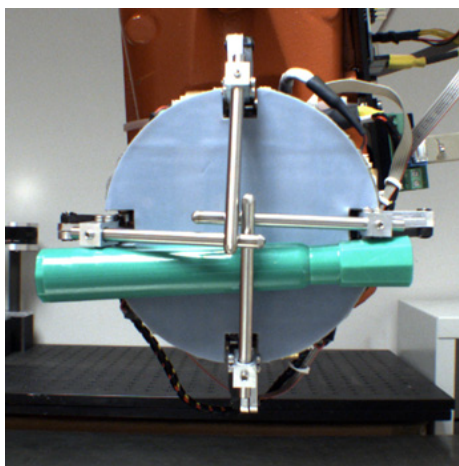
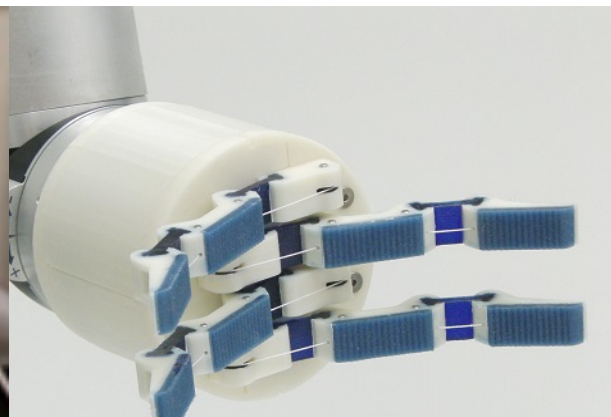
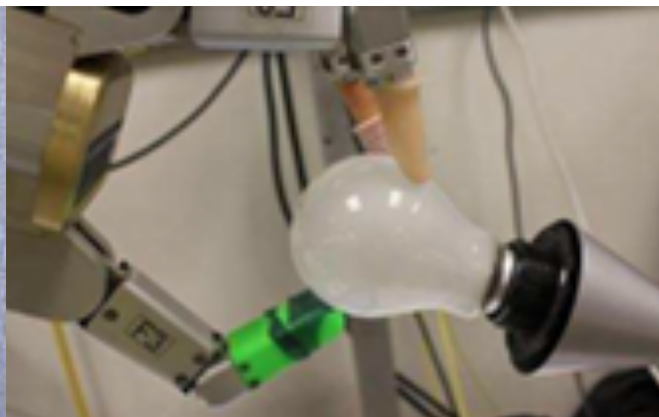
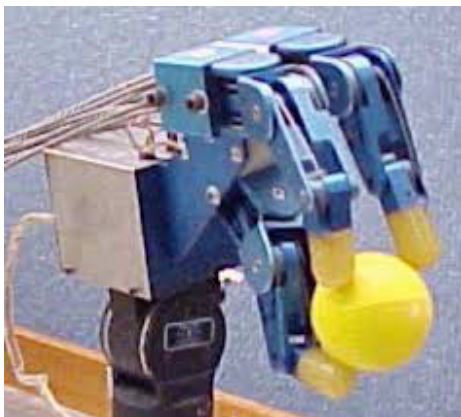


P



A

R









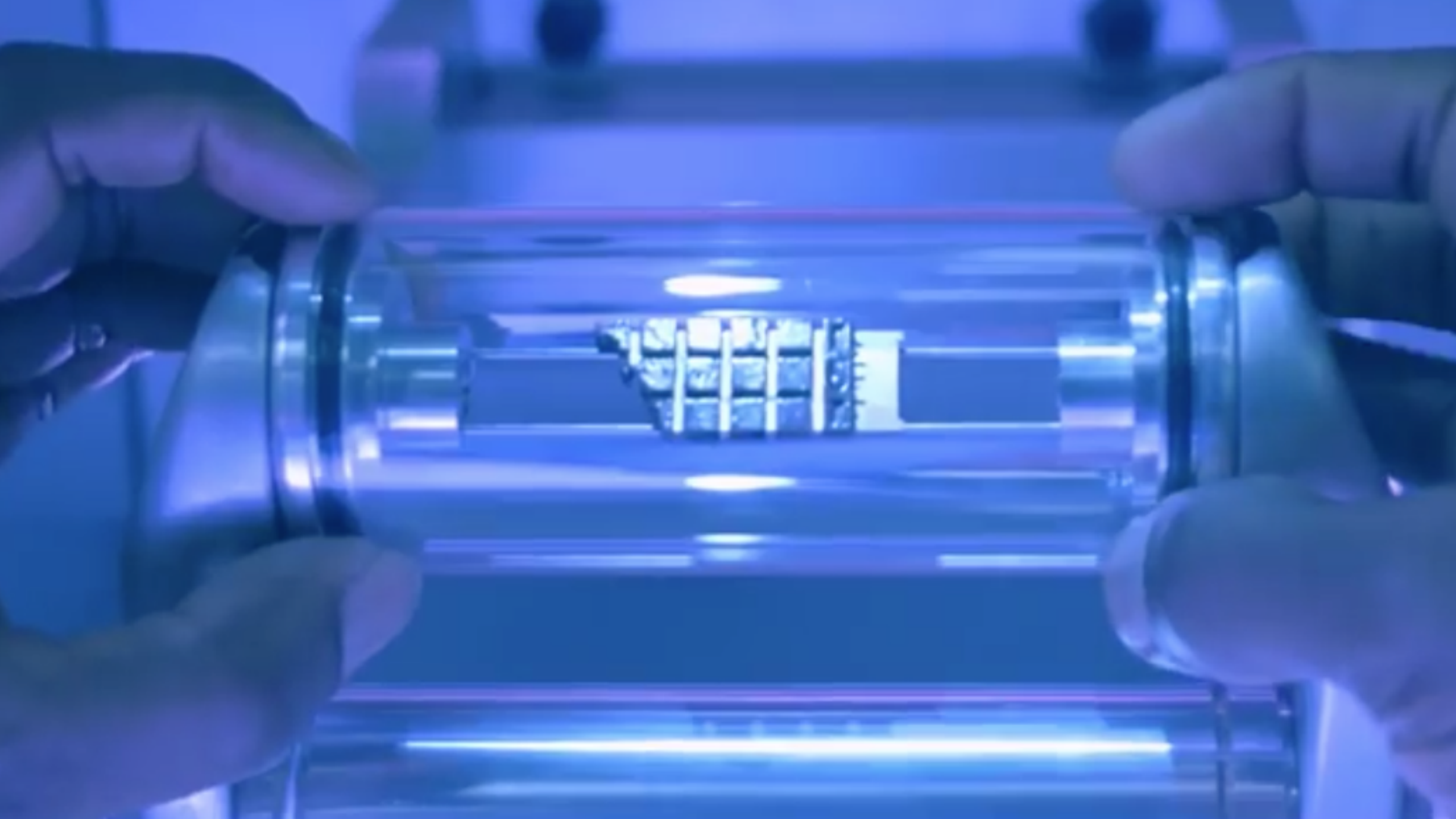


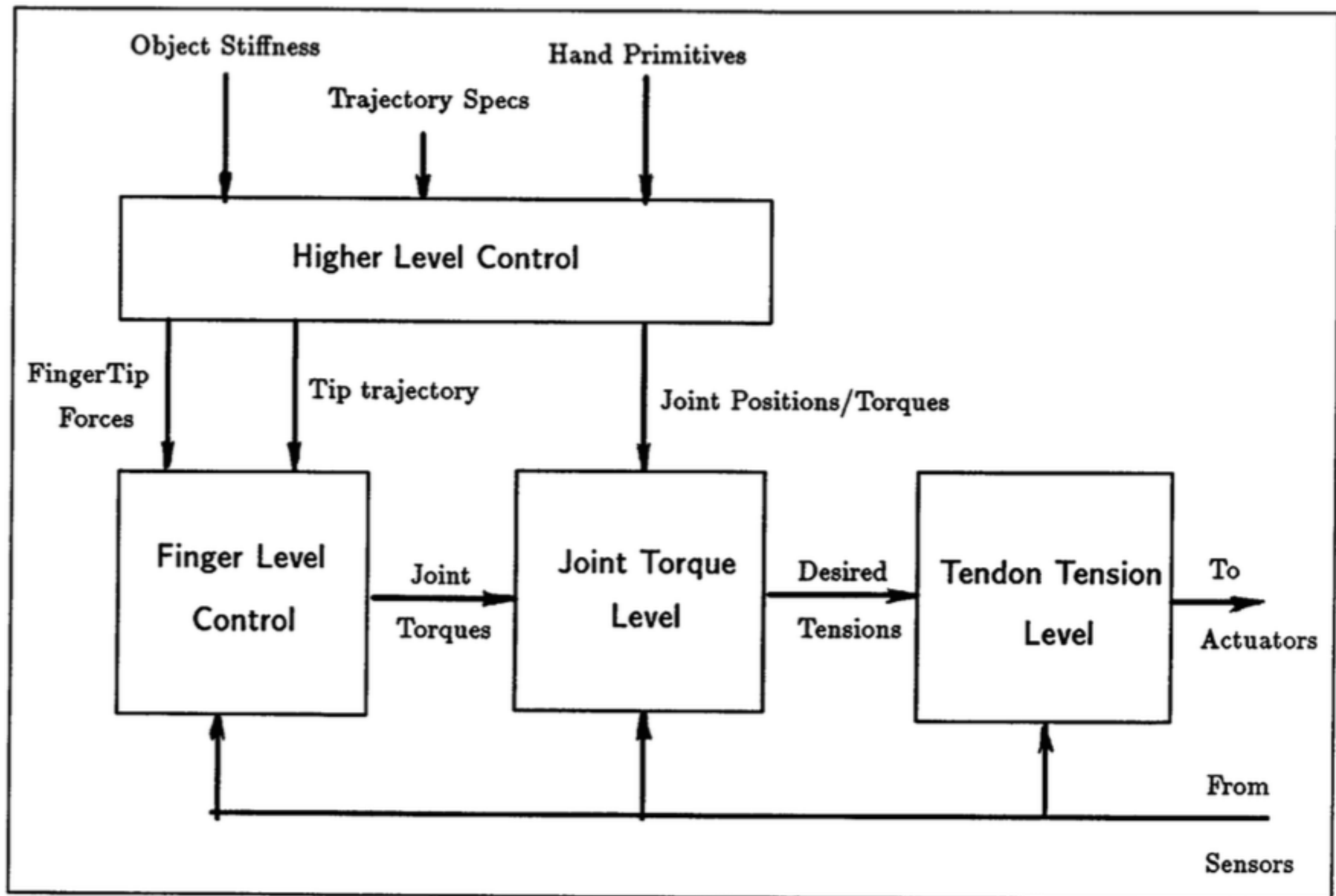
Grasping is solved!



Grasping for pick-and-place is solved

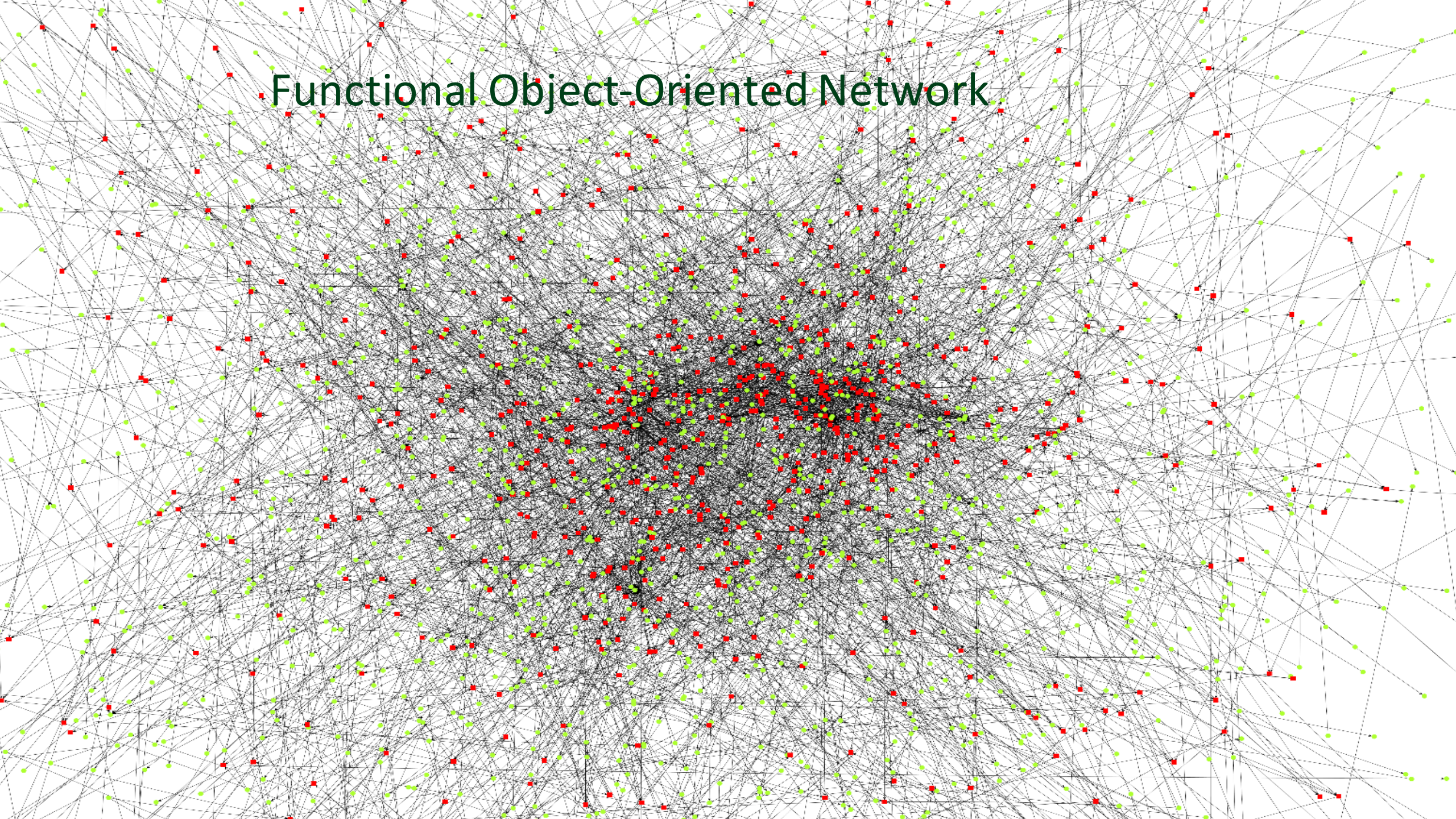
Grasping for manipulation will be solved

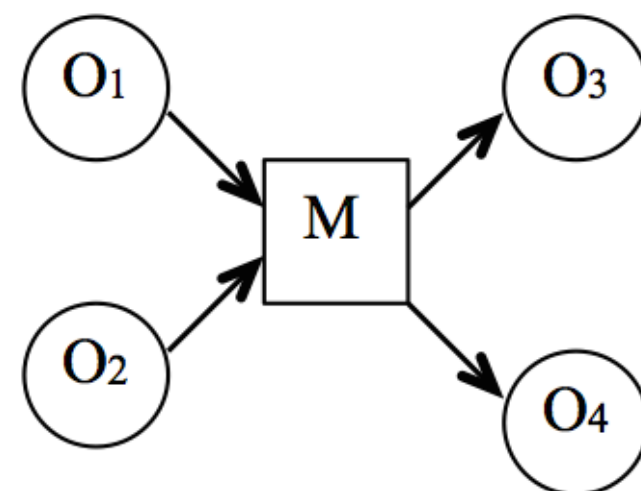
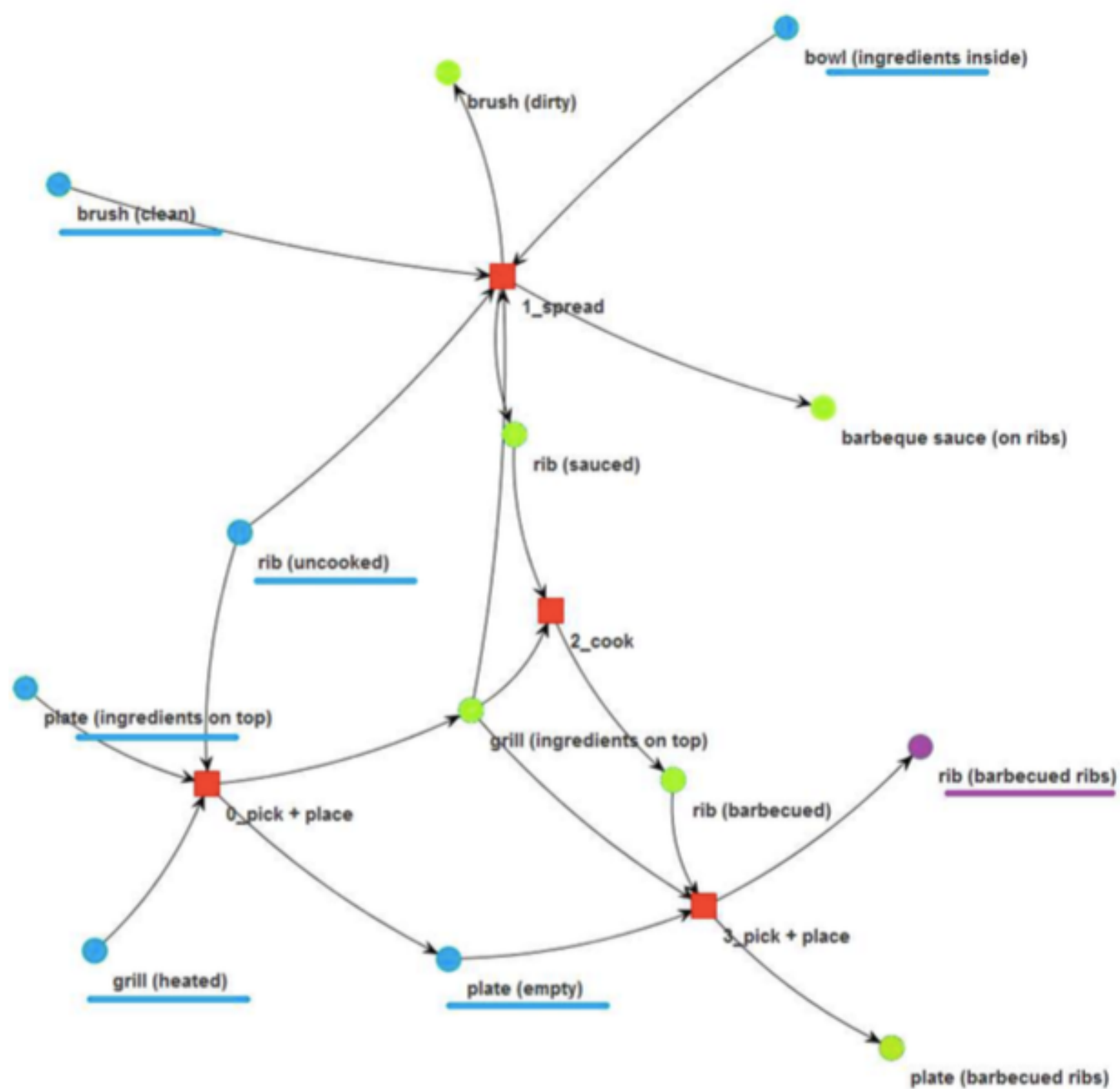




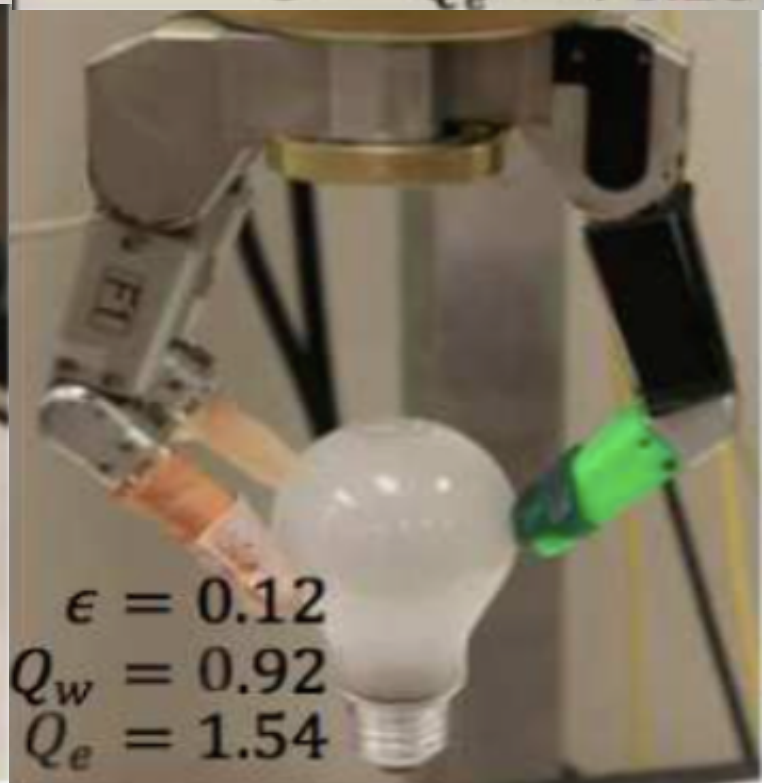
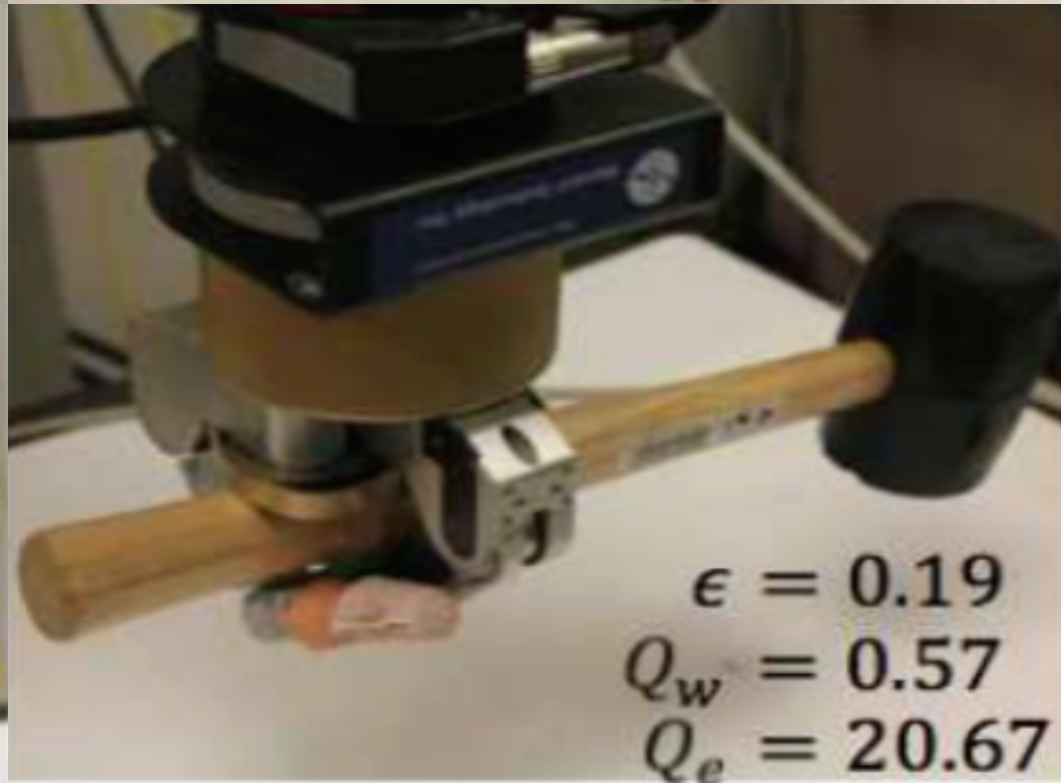
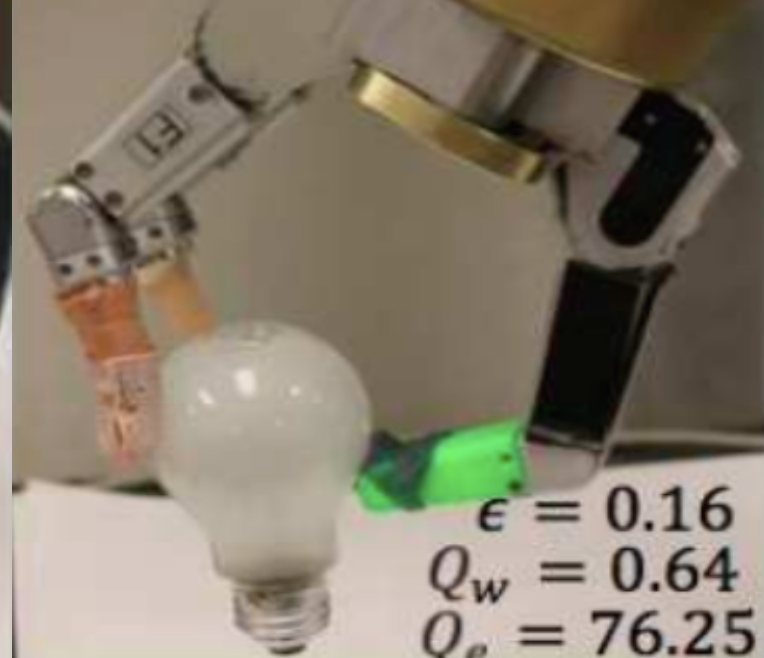
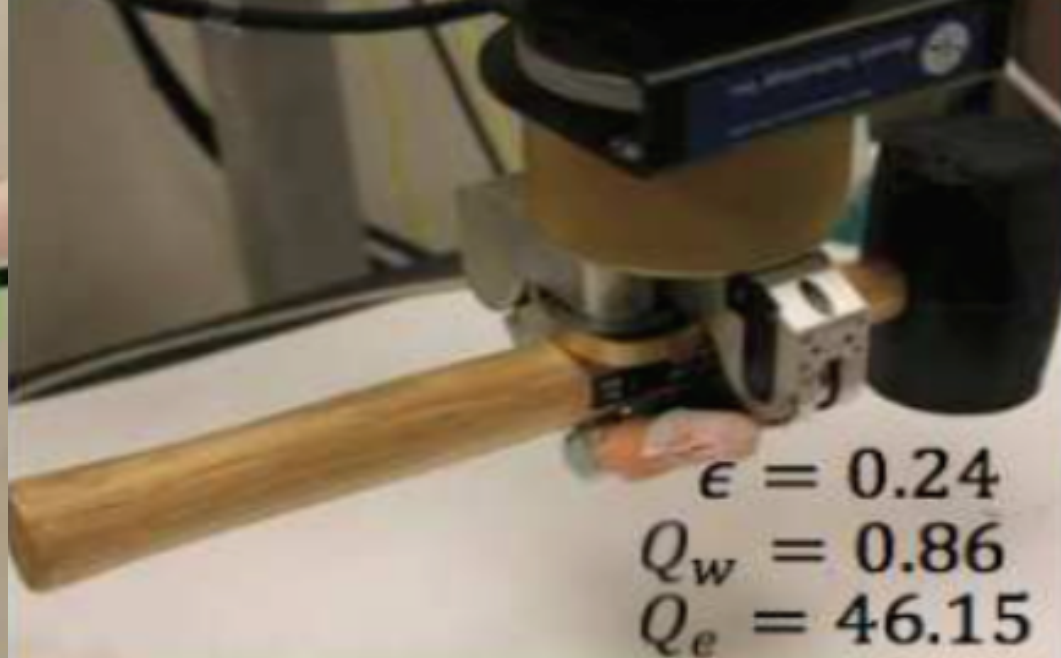


Functional Object-Oriented Network



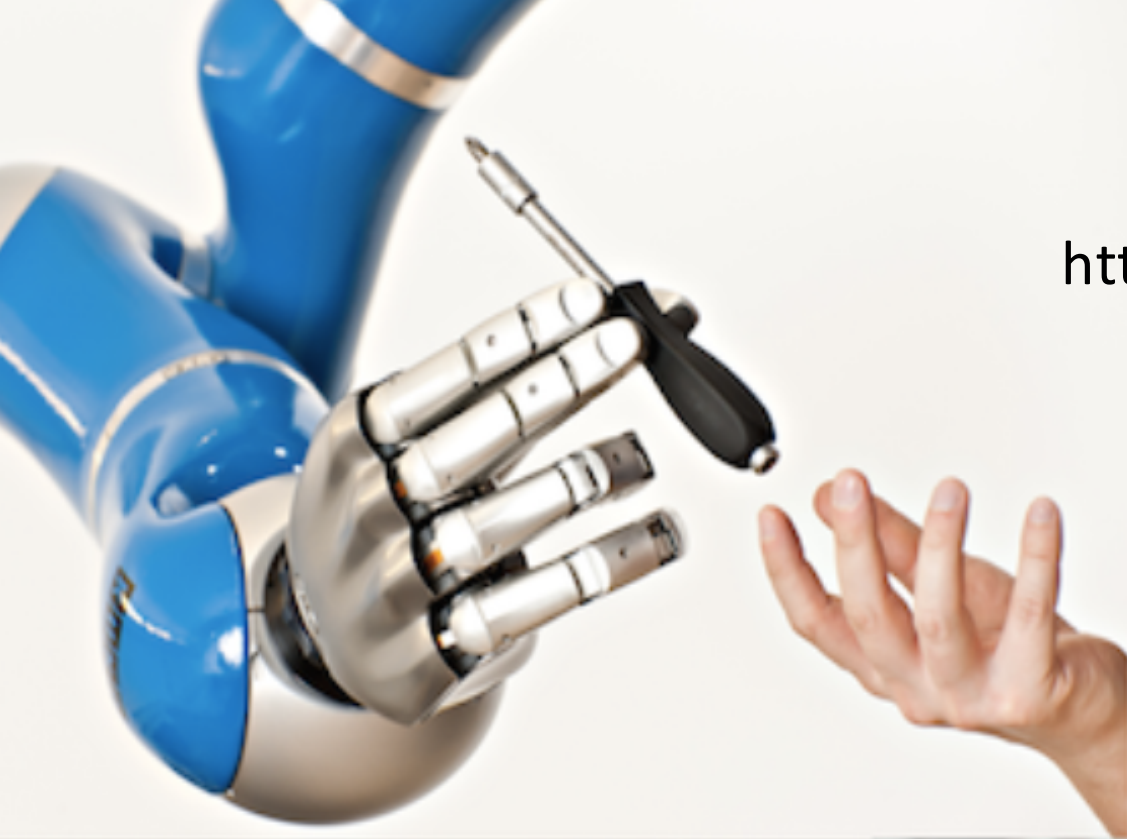






Robot Intelligence vs. Computer Intelligence

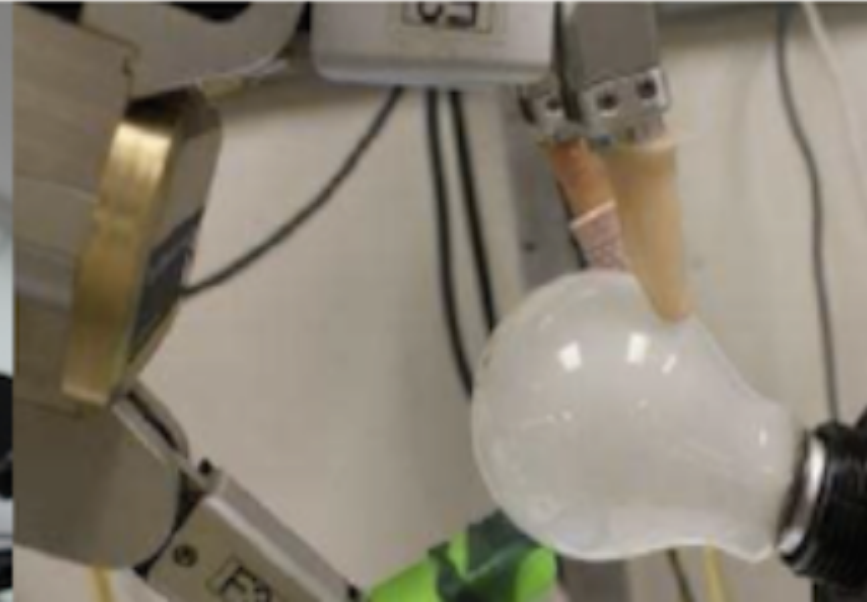
Robots physically interact with the world



http://www.rhgm.org/activities/competition_iros2016/

Robotic Grasping and Manipulation Competition

@ IROS 2016 (Oct. 10-12, 2016) in Daejeon, Korea



- Use a spoon to pick up peas
- Use a spoon to stir water in a cup
- Shake salt shaker
- Plug into a socket
- Hammer a nail
- Transfer straw into a to-go cup with lid
- Putting on or removing bolts from nuts with a nut driver
- Use a saw to saw open a cardboard along a line
- Open a bottle with a locking safety cap





Make Grasping Great Again!!!

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