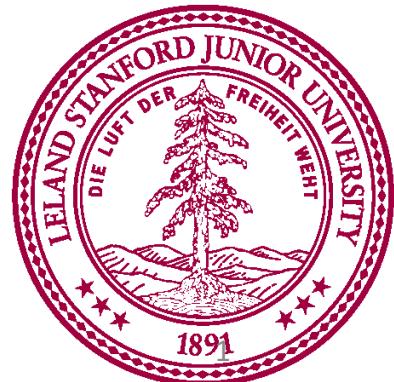


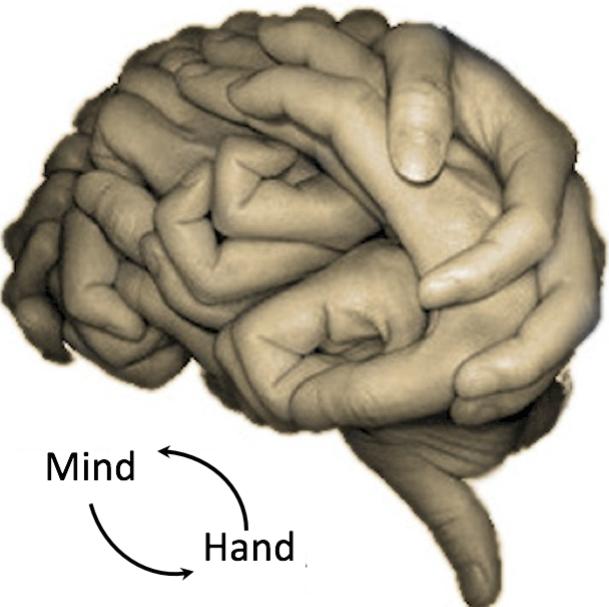
Hand and Mind

Yu Sun

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Robot Perception and Action Lab
rpal.cse.usf.edu





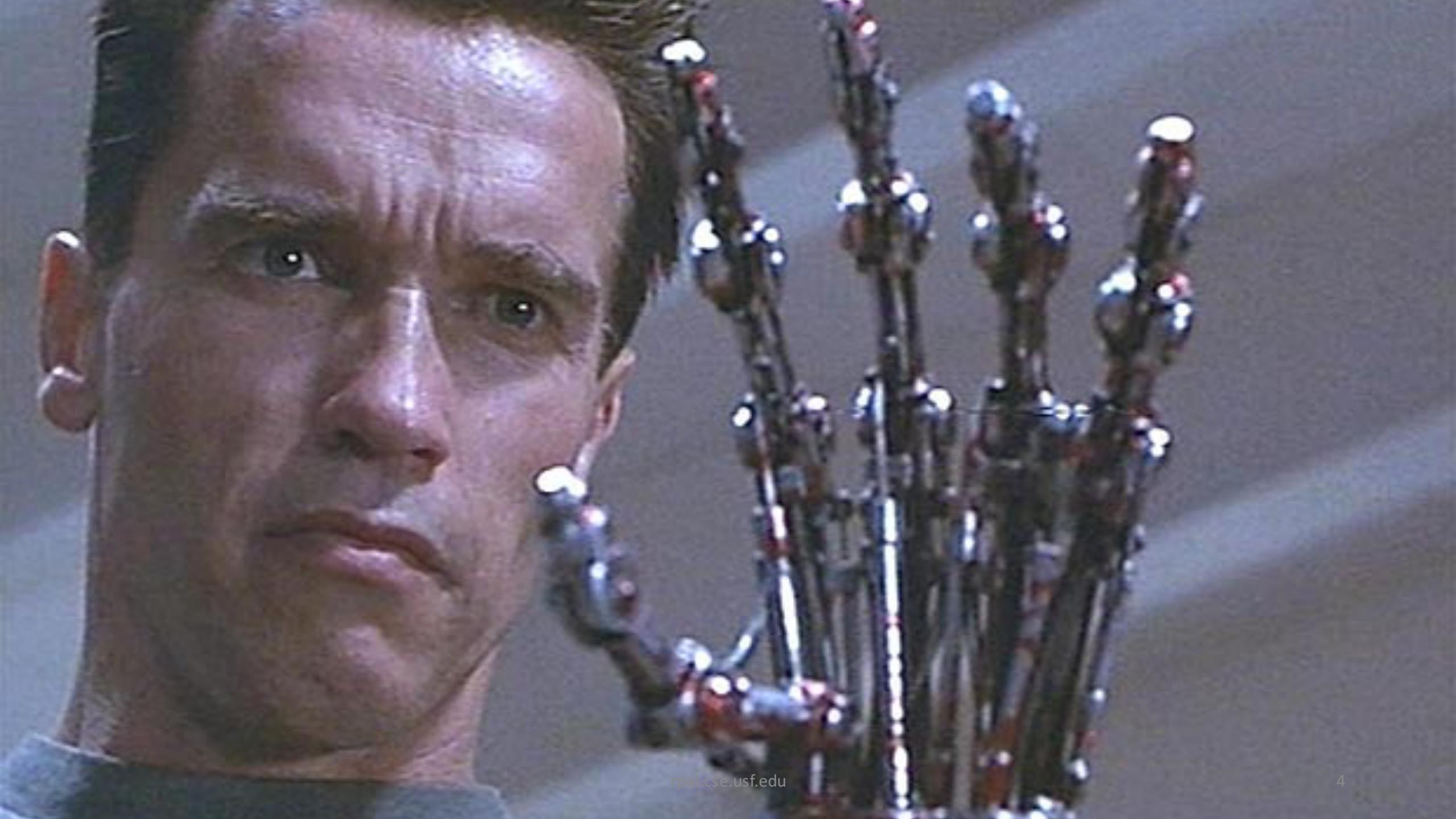
Anaxagoras

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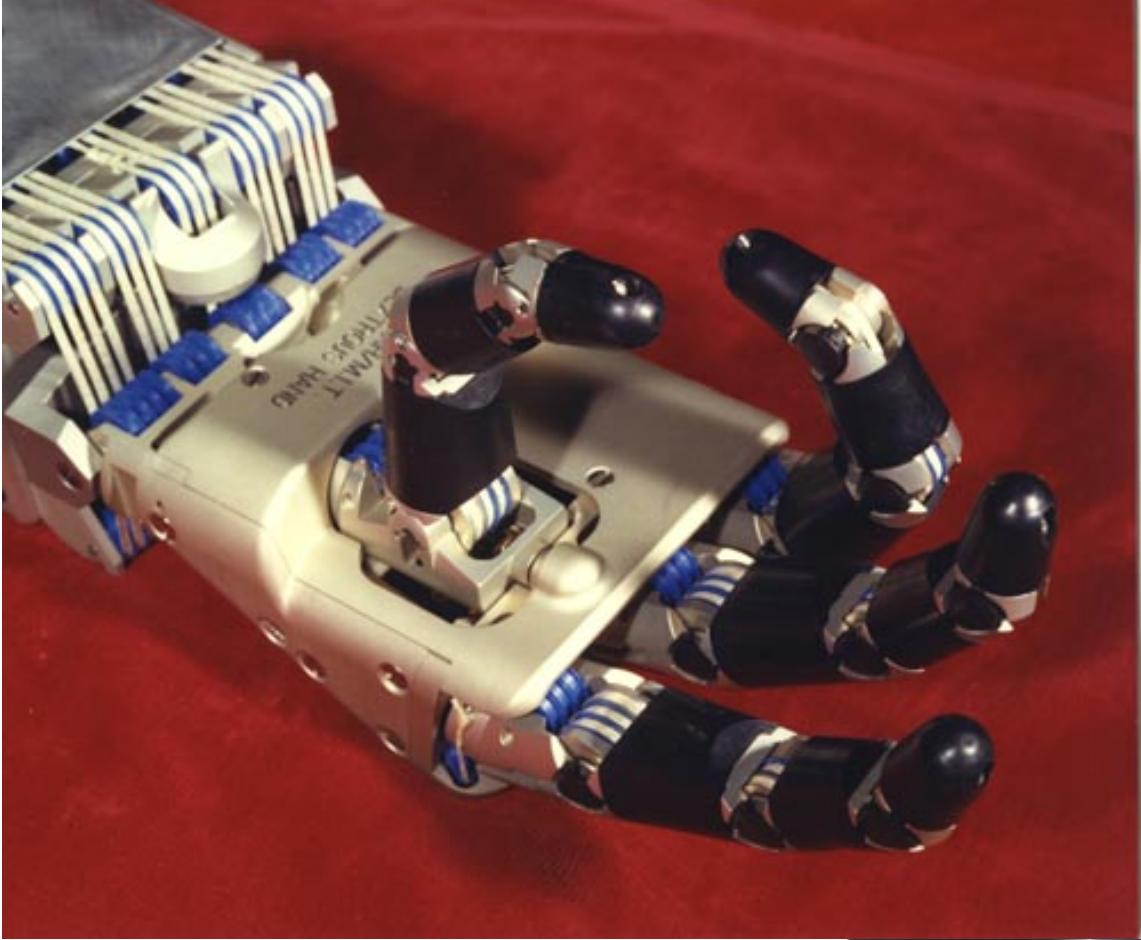


Aristotle

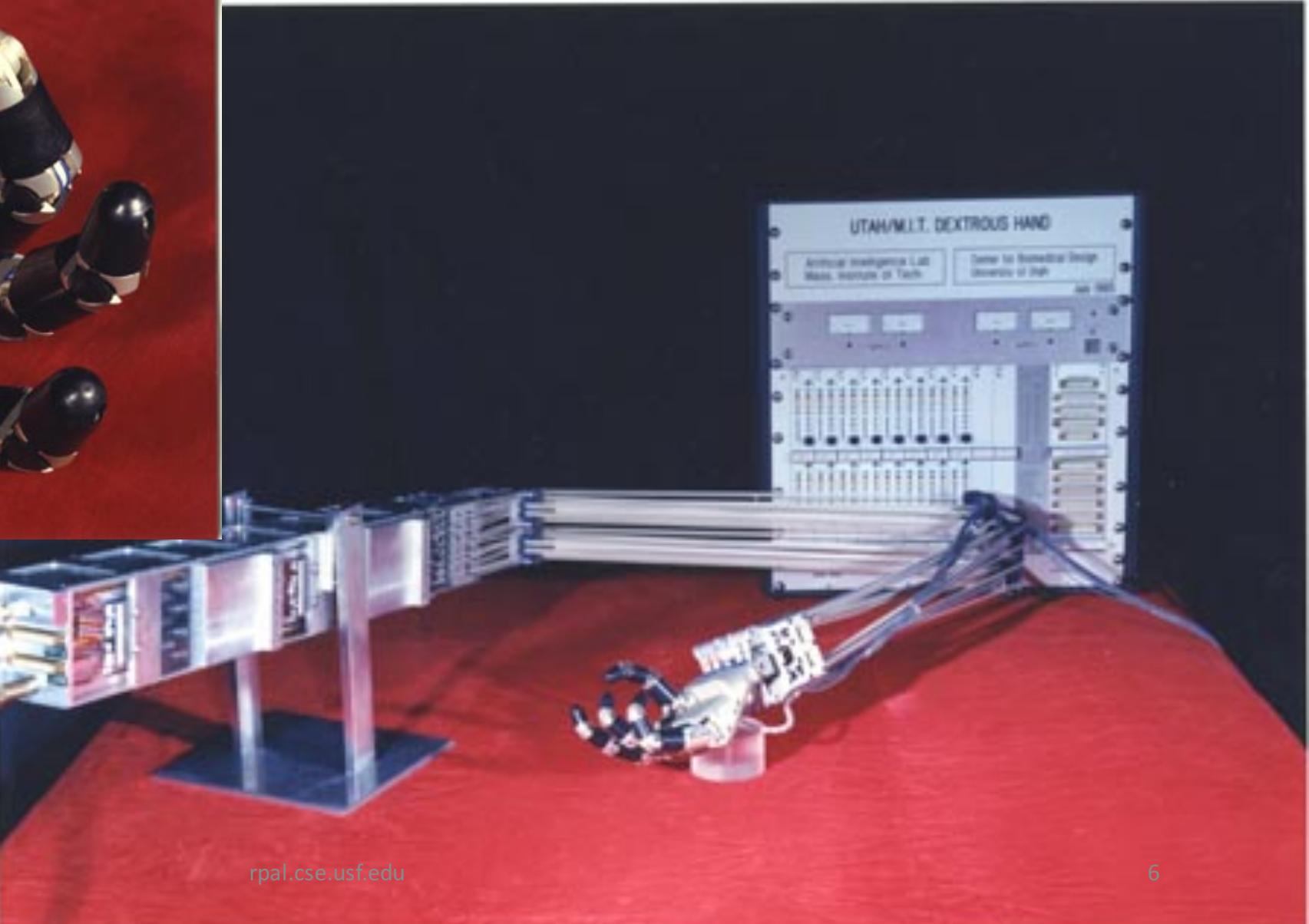








Utah/MIT Hand, 1983





Stephen Jacobsen



John Hollerbach

Anthropomorphic Hands



DLR/HIT Hand



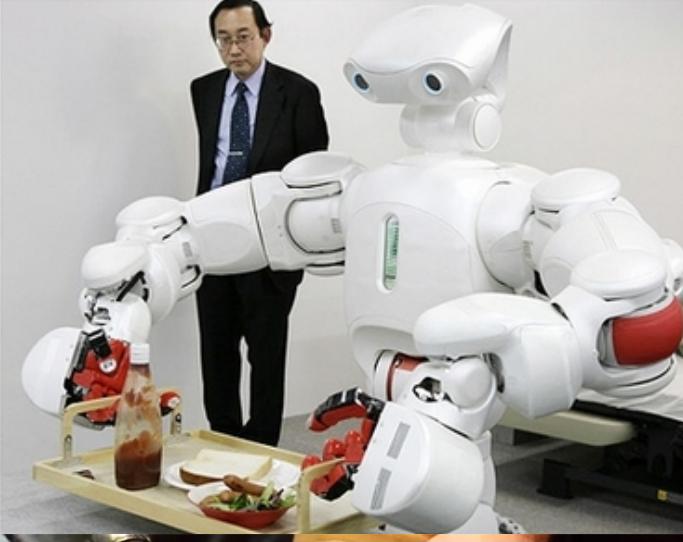
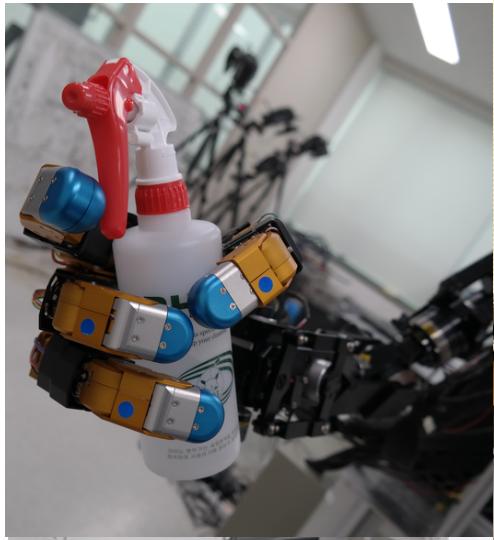
NASA Hand



Bionic Hand



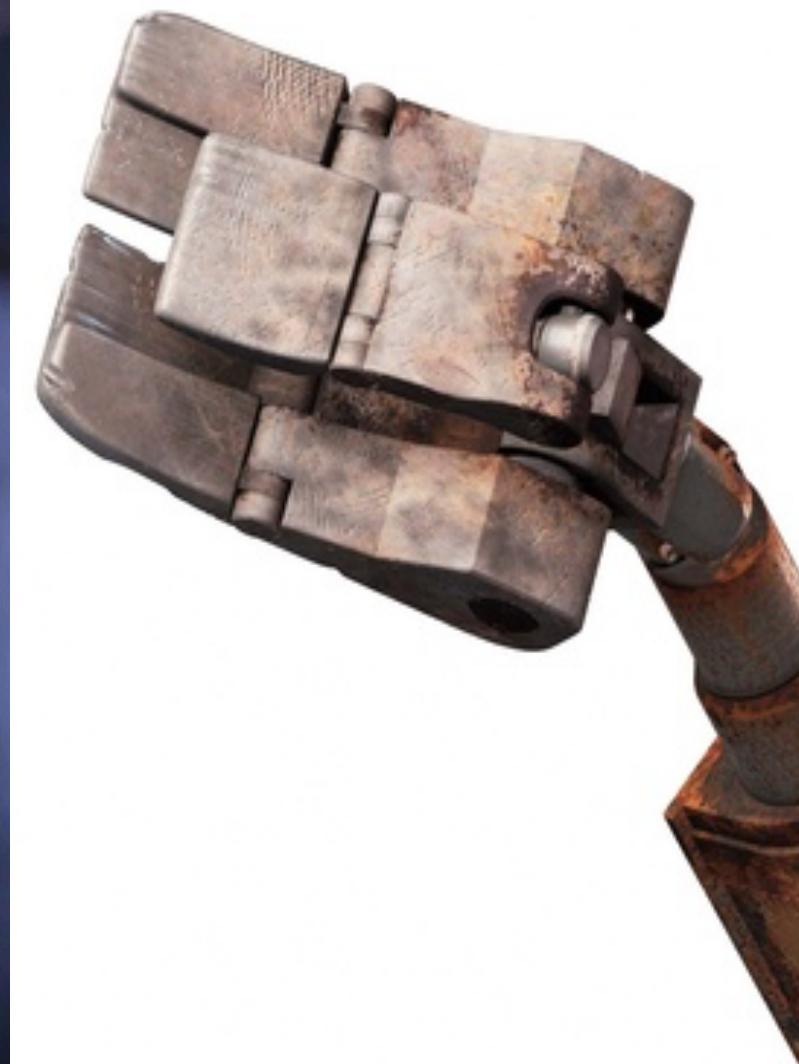
Shadow Hand



Make your robot not just
cool, USEFUL.



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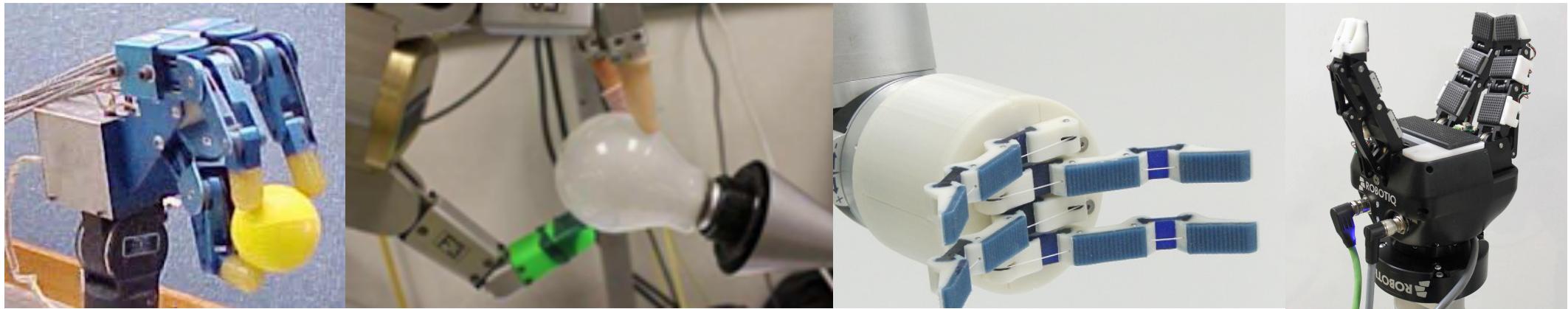
11

P



A

R







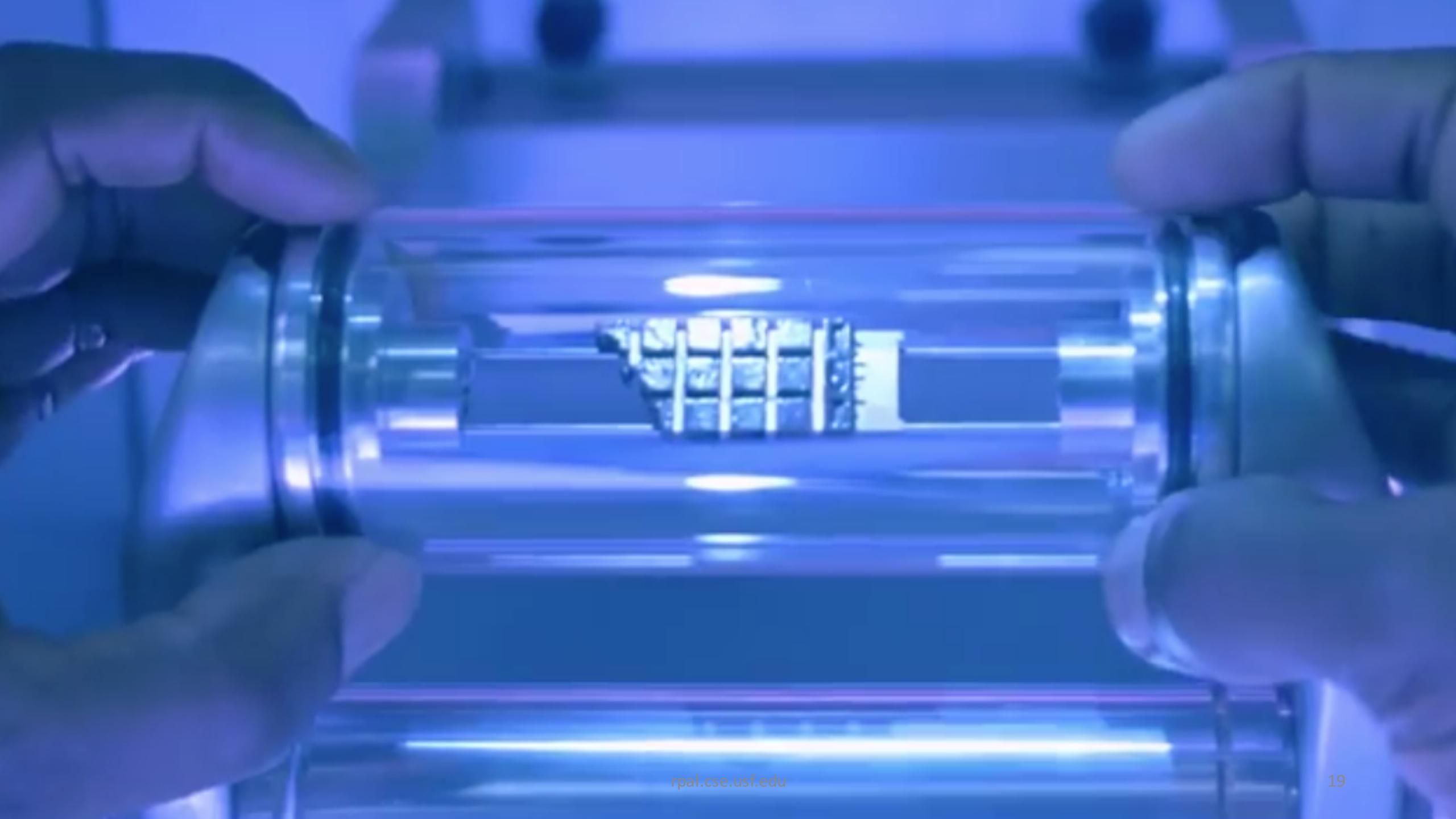


A close-up photograph of a man with dark hair, a beard, and glasses, wearing a dark suit and white shirt. He is looking upwards and slightly to his left. A small microphone is clipped to his shirt. The background is dark with some large, partially visible letters, possibly "ARK".

Grasping is solved!

Grasping for pick-and-place is almost solved

Grasping for manipulation will be solved





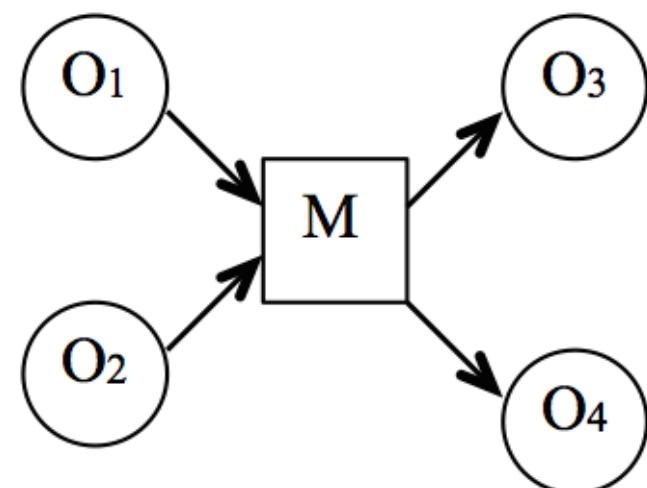
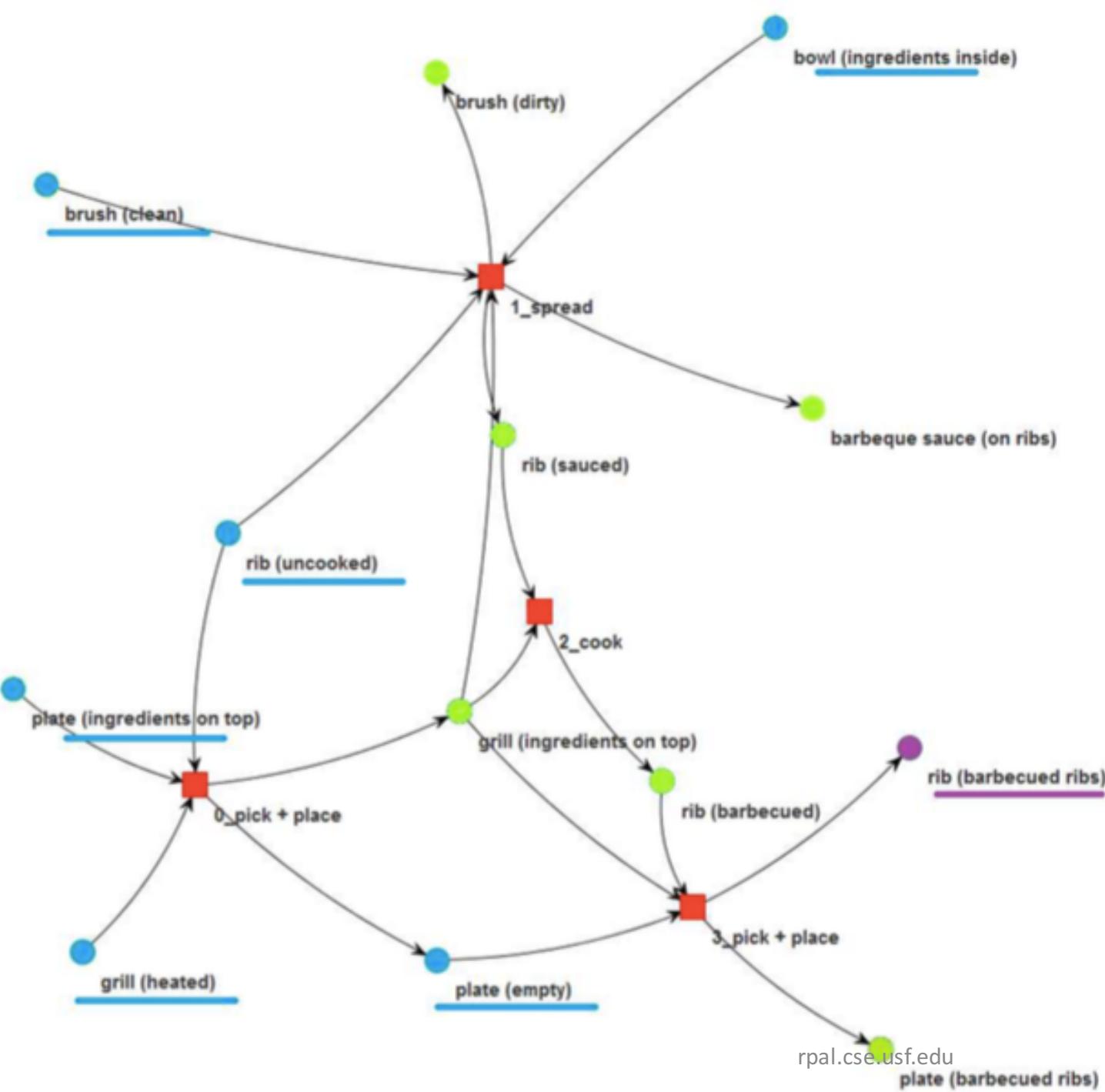
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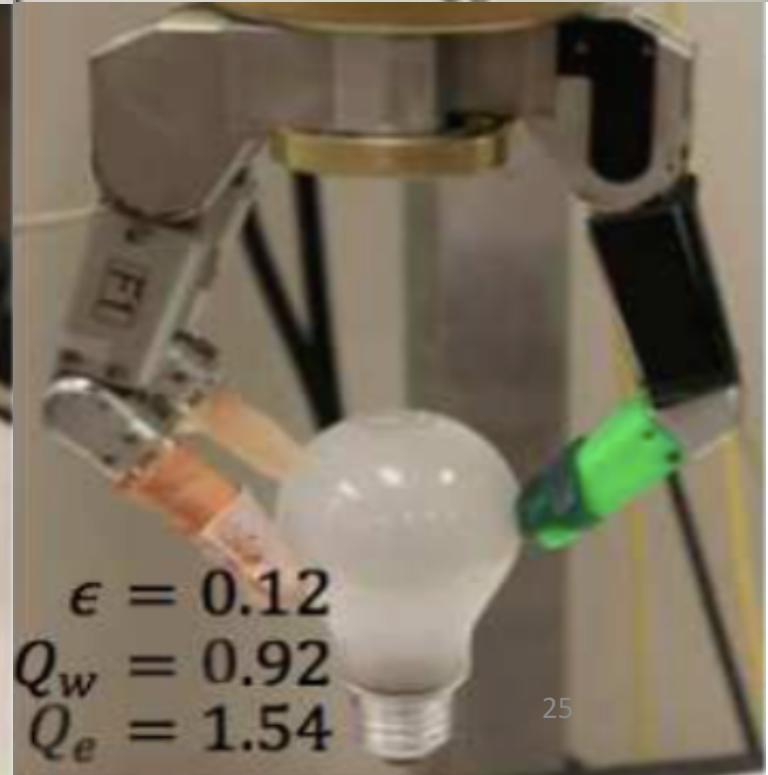
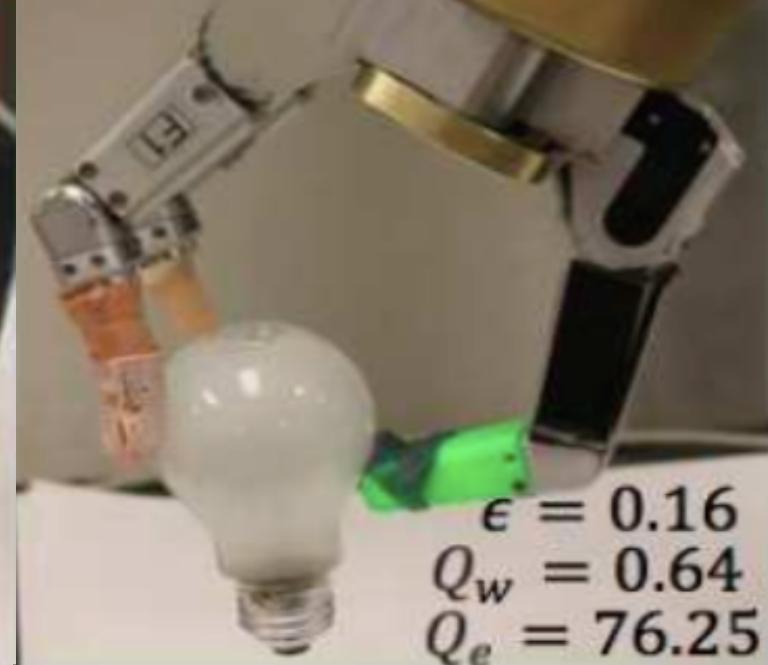
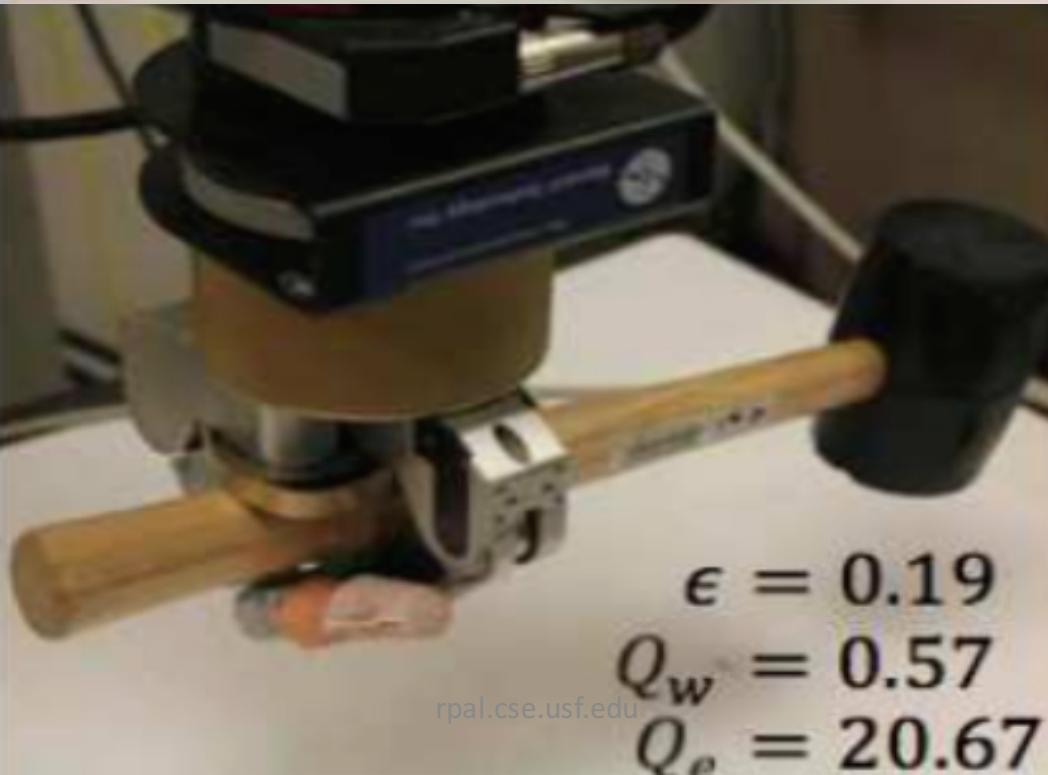
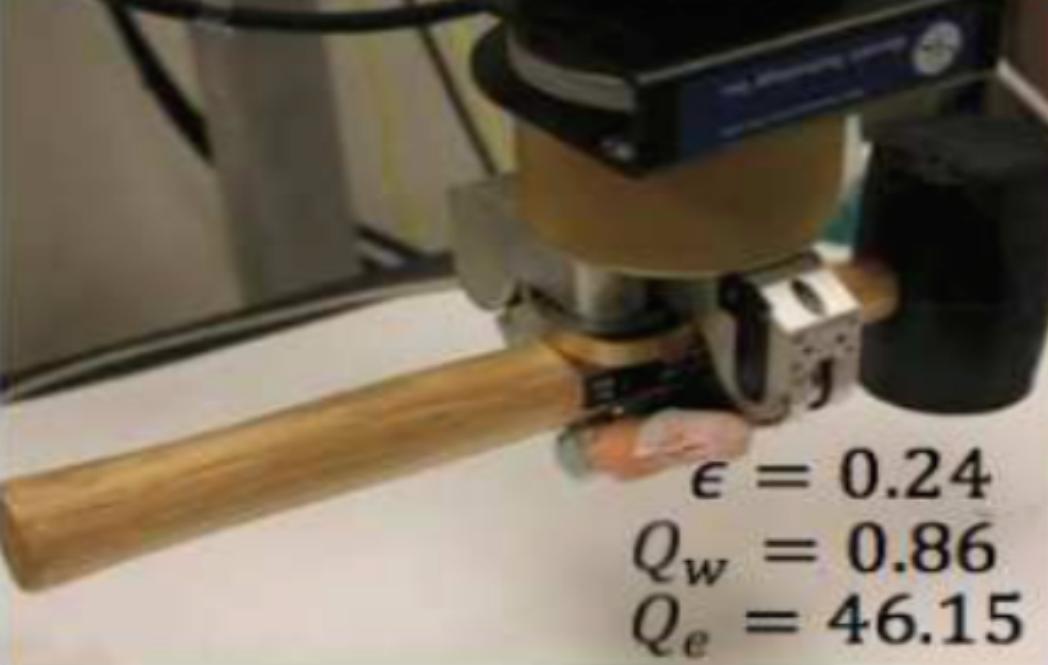
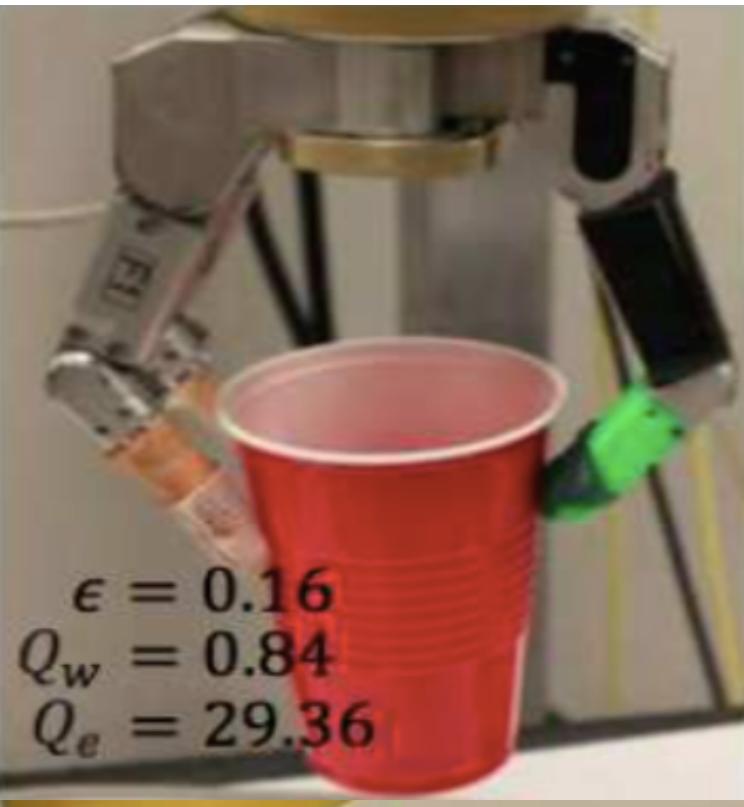
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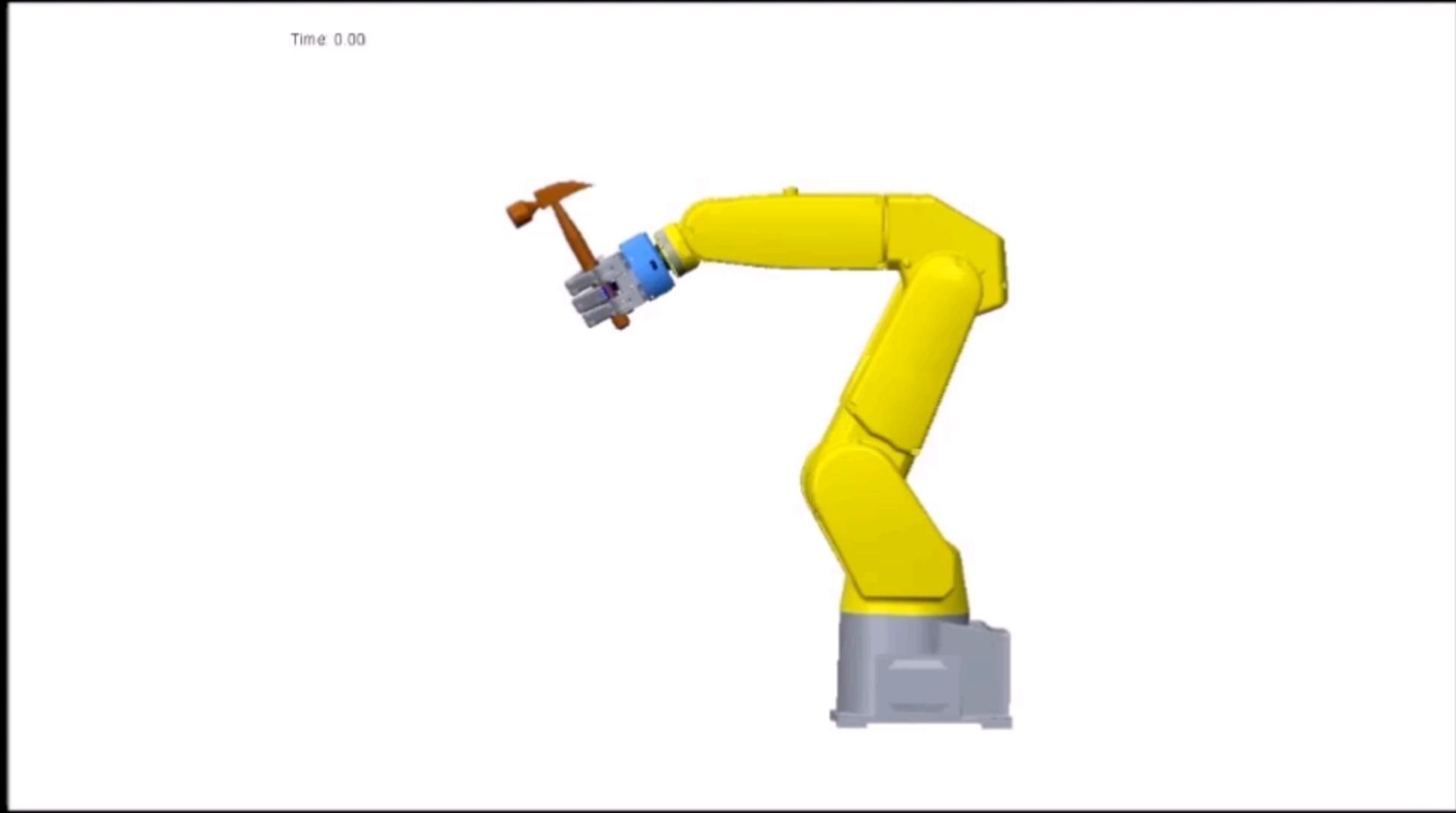
Constructing Sub-Graph, an Example

Functional Object-Oriented Network (FOON)









Robot Intelligence vs. Computer Intelligence

Robots physically interact with the world



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Thank You!

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