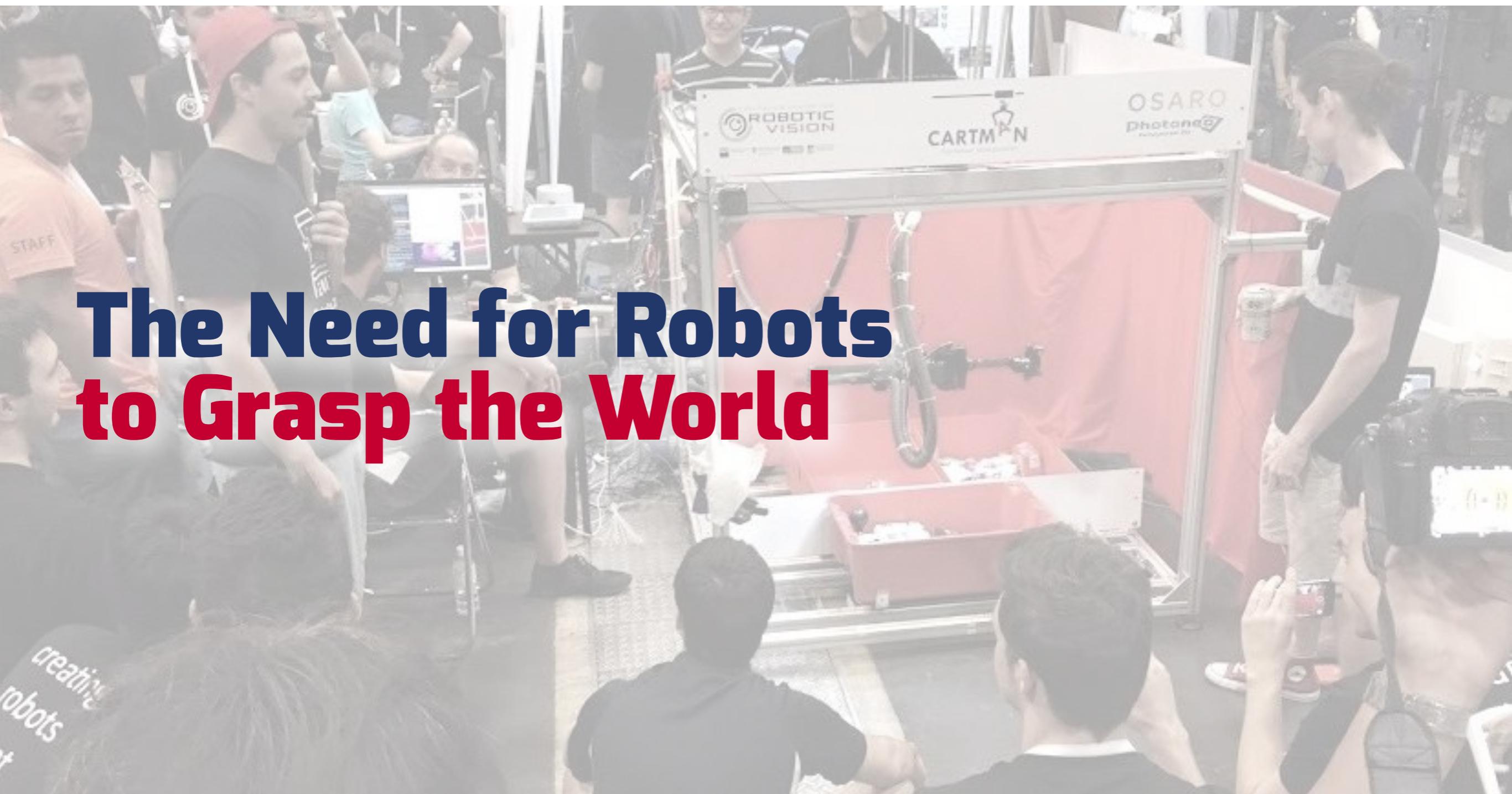




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The Need for Robots to Grasp the World

A semi-transparent background image showing a robotic arm with a gripper attached, positioned over a red container. Several people are visible in the background, some looking at the robot and others working in the workshop. Logos for "ROBOTIC VISION", "CARTMAN", and "OSARO photoneo" are visible on equipment in the background.



2013

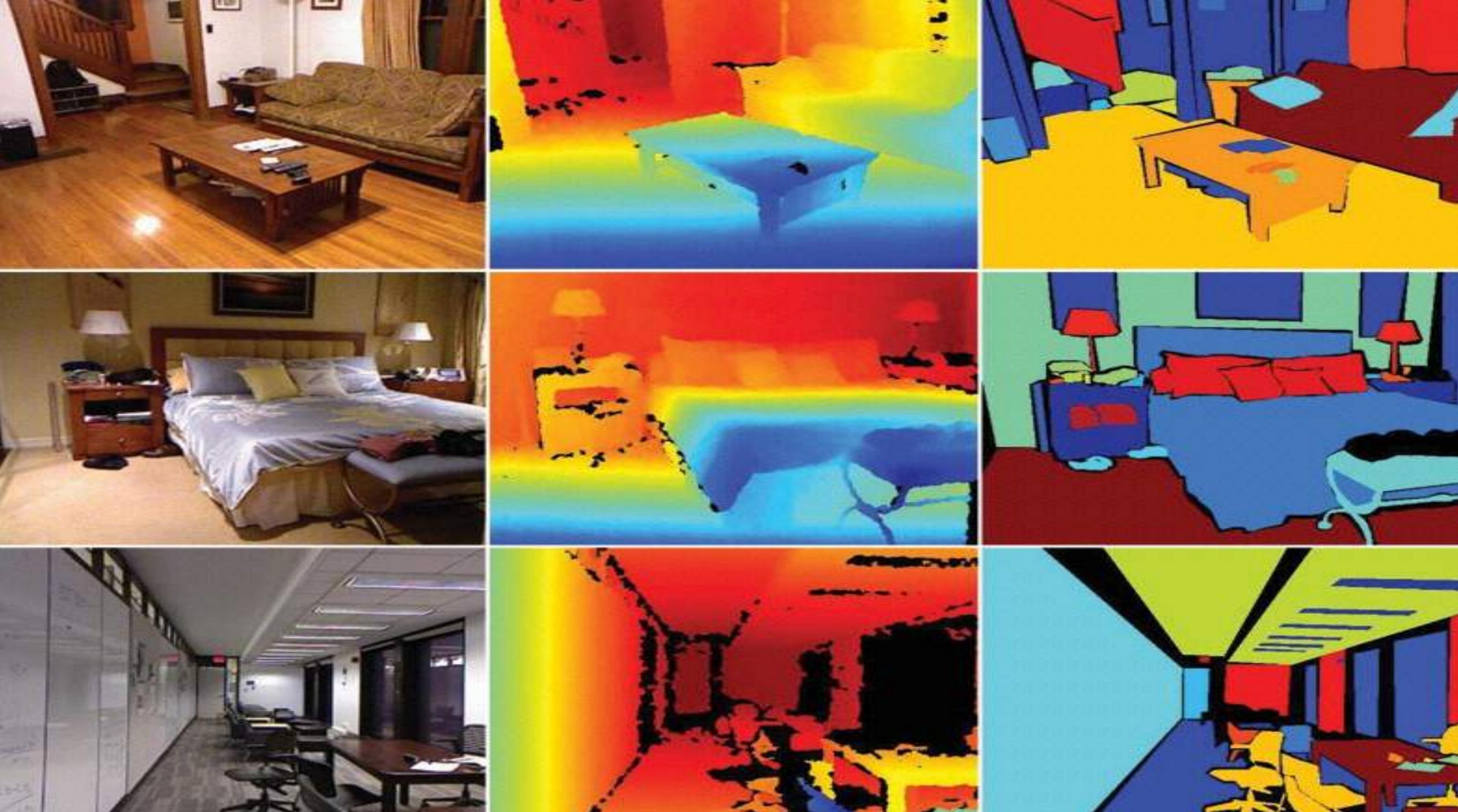


Pixar (2008)



QUT
Robots
for the **real** world

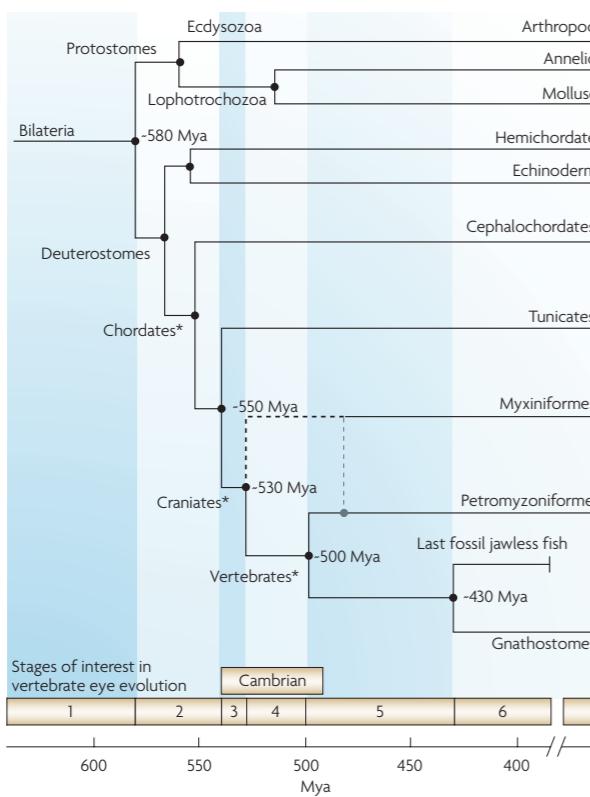


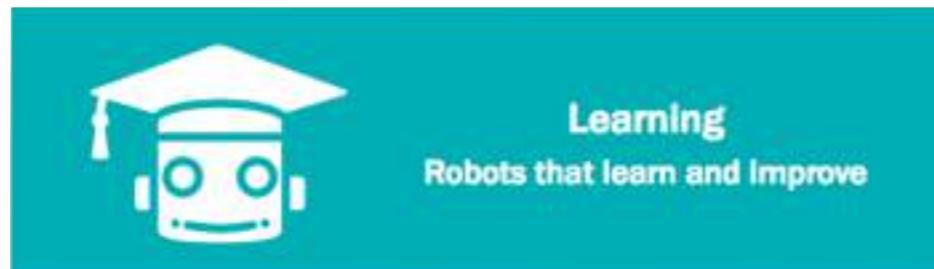
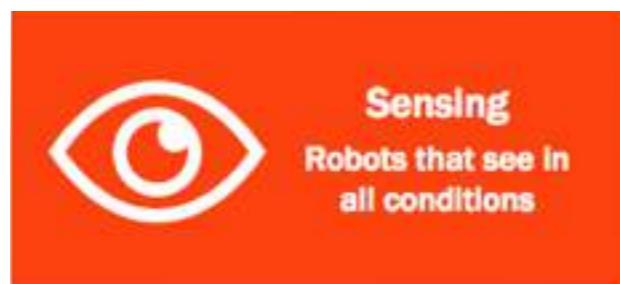


perceive
the world

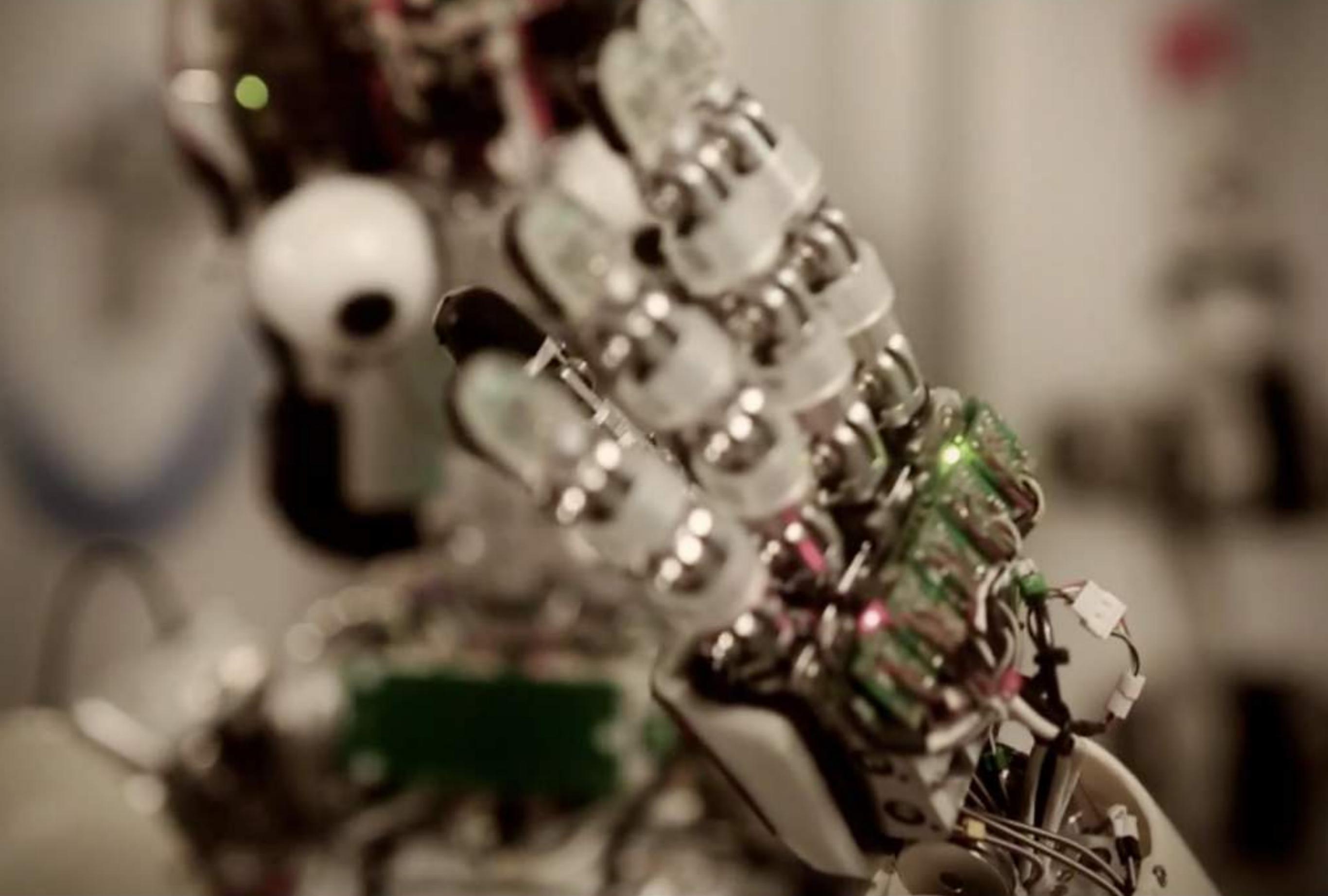
96% animals have eyes

10 designs of eyes





creating robots that see





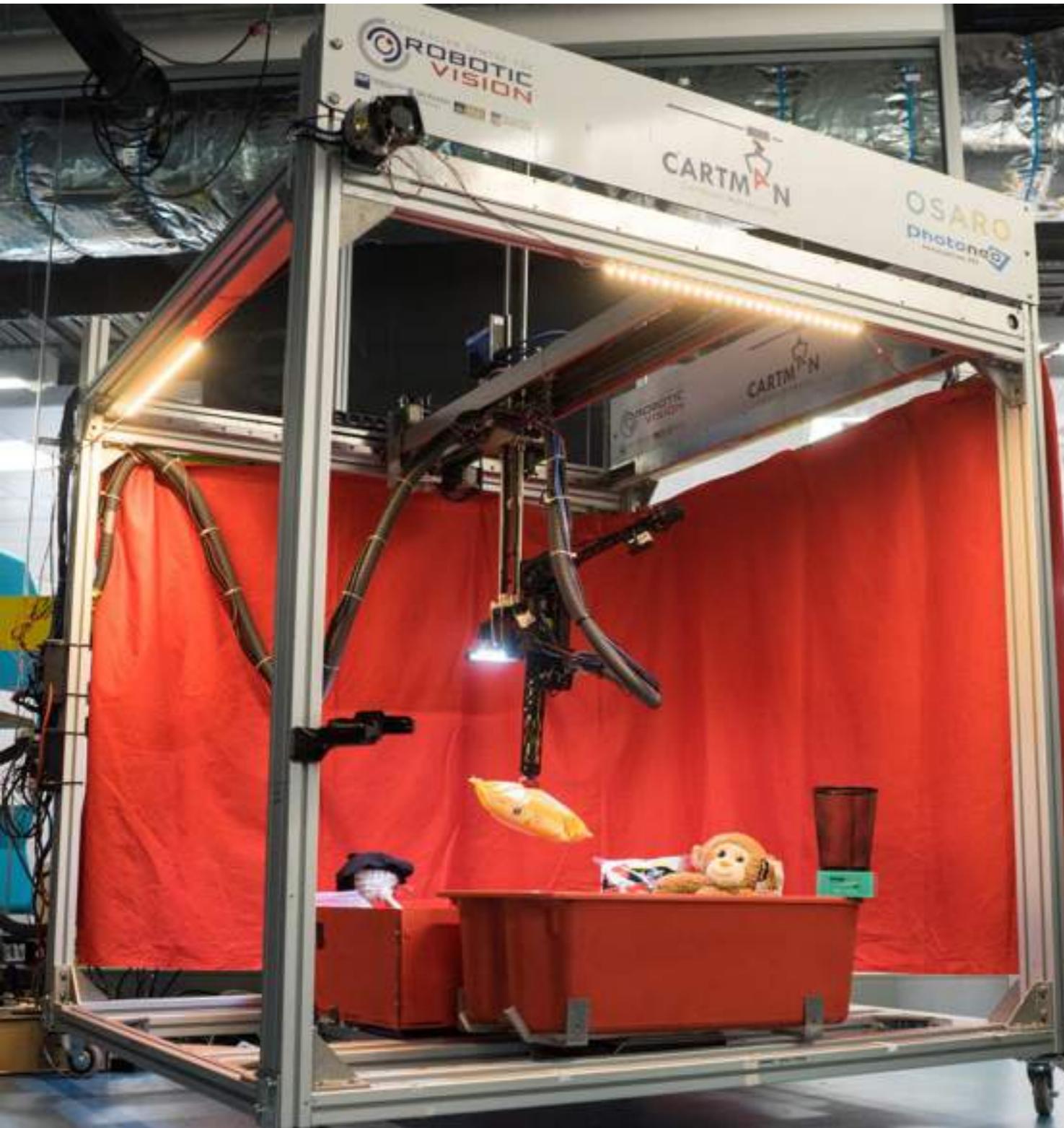


What was the
amazon robotics Challenge 2017 ?



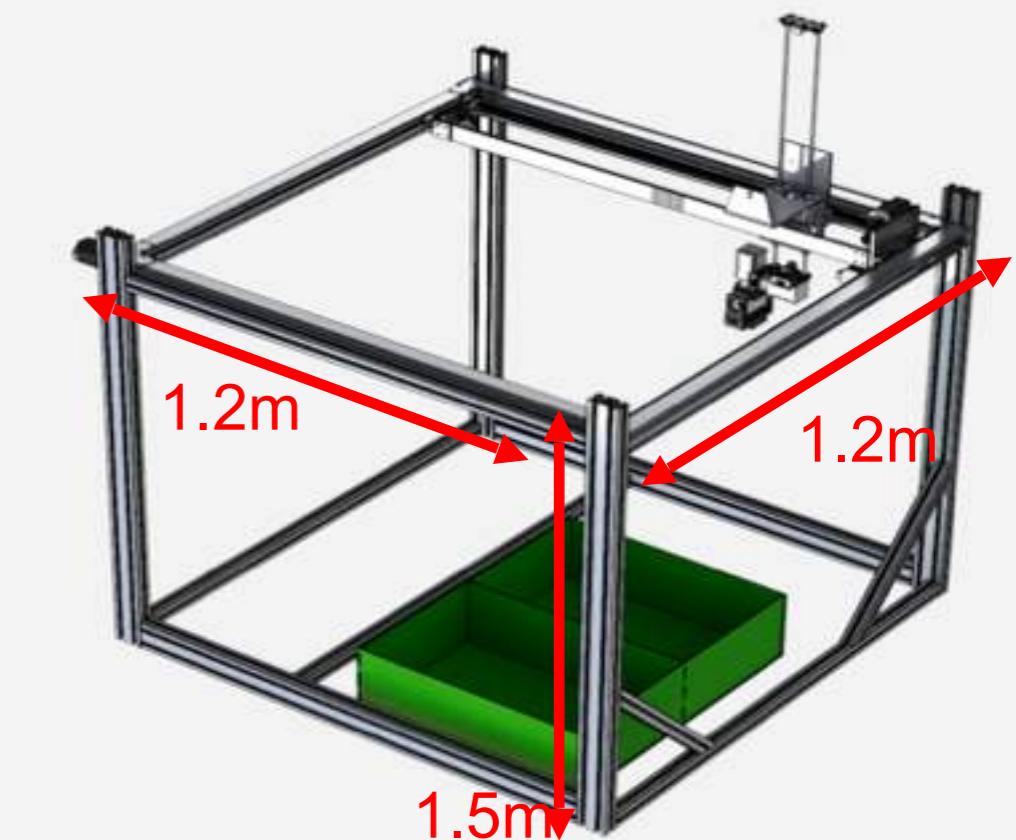
Amazon Fulfilment Centre





Hardware

#cartman



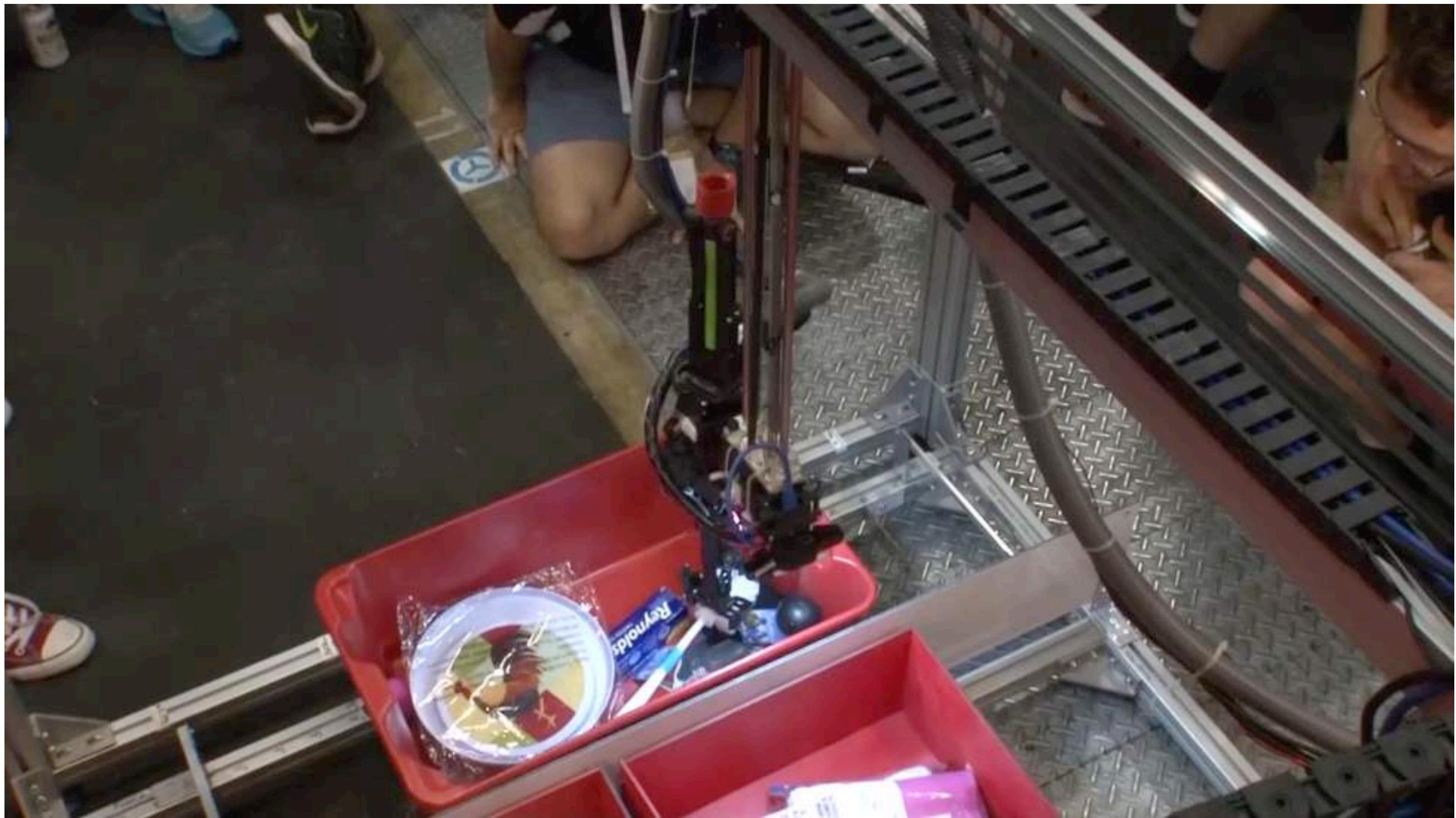
In Action

#cartman



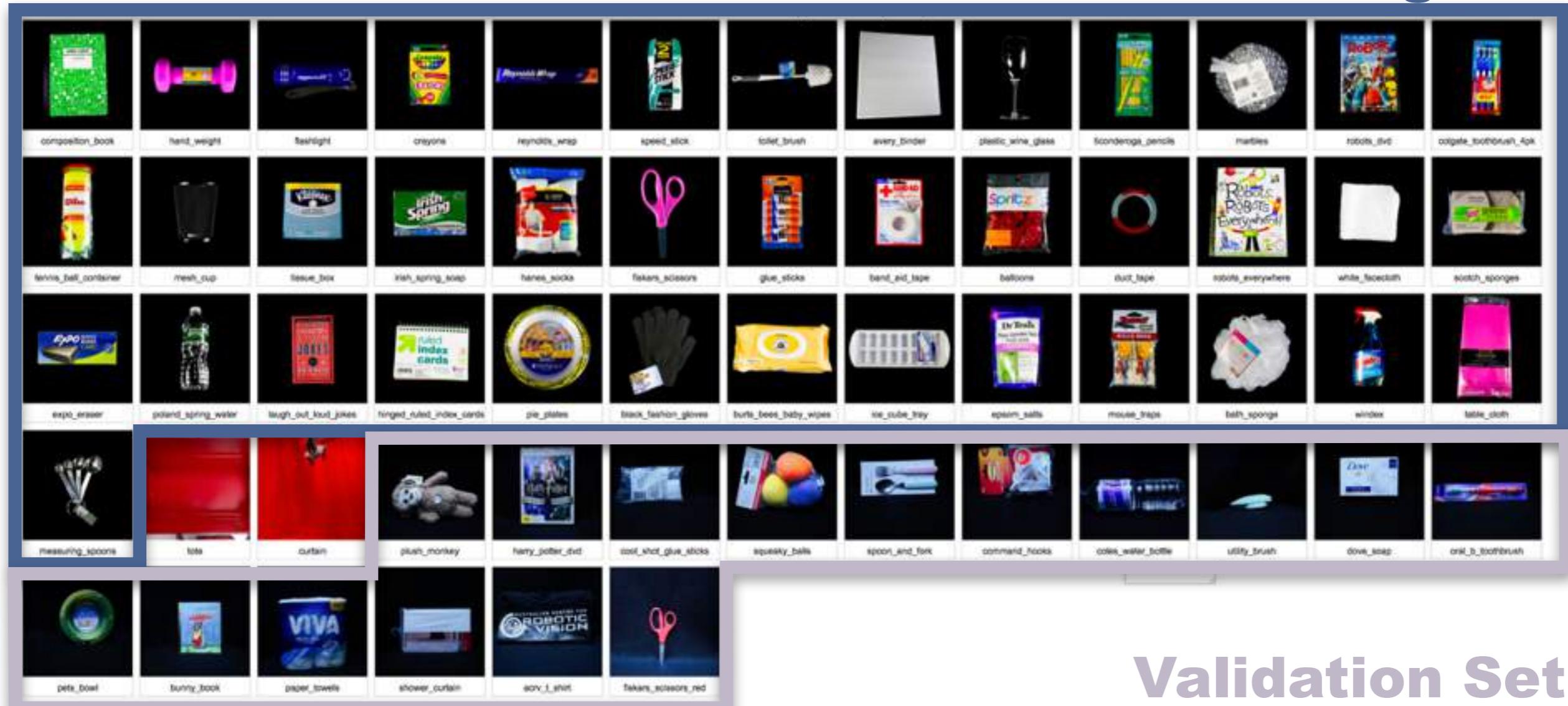
In Action

#cartman

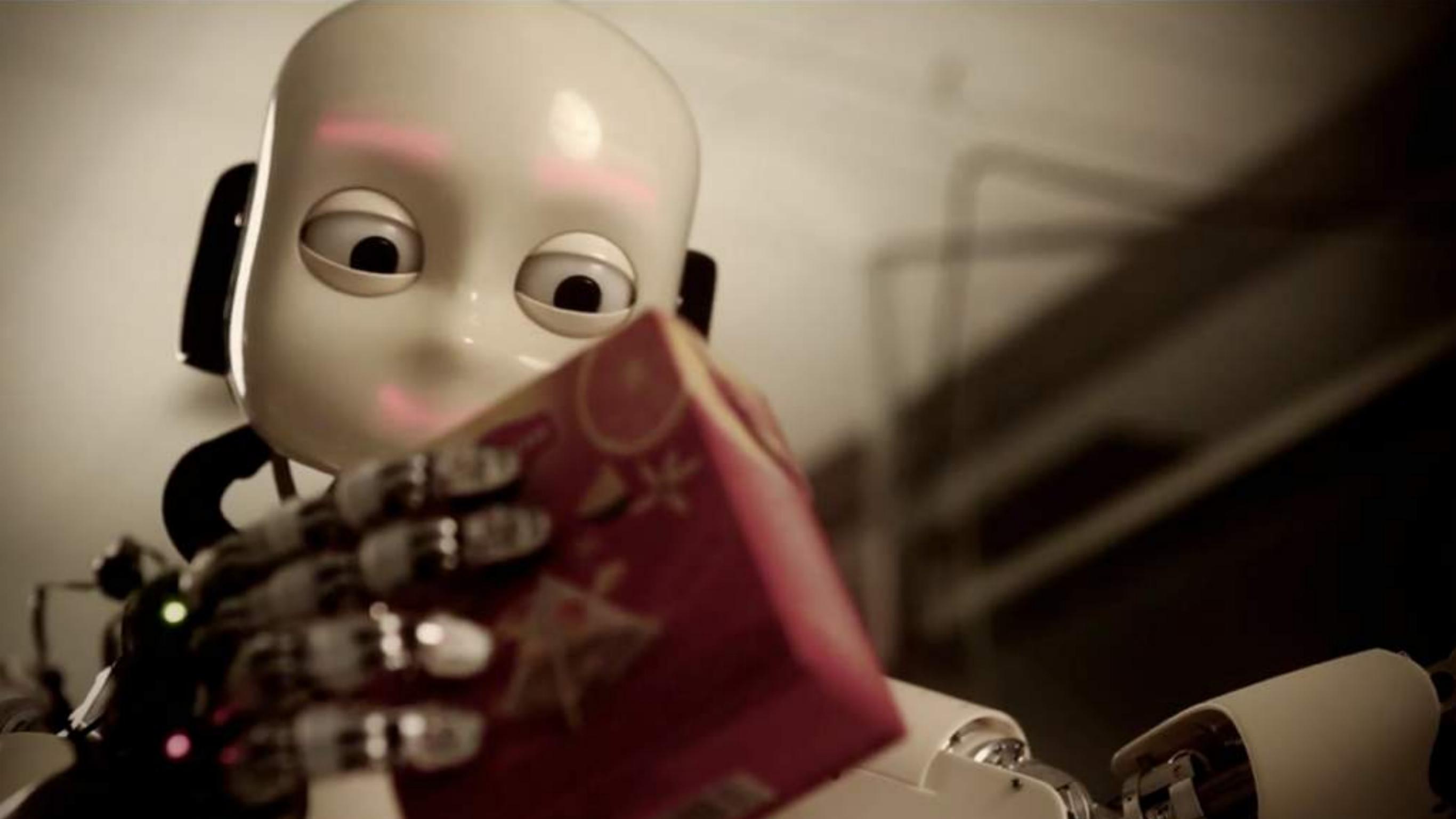


Object Variety

Training Set (40)



Validation Set (16)



actions for
perception

How can we grasp the world?

bio/neuro
inspired



learning/
intelligence



*benchmarking
and testing*



cloud / high
performance
computing



thank you



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