Project Context
- Humans are naturally good at picking up objects.
- Robotic grasping is improving, but is still not very good.
- How can we use human data to improve robotic grasping?

Study Procedure:
- Objects are picked up and moved by either robot or own hand (randomized).
- Natural Task performed with object.
- Tasks repeated with hand not yet used.
- Process is repeated with grasps the subject would classify as bad.

Applications of Data
- **Eye Tracking Glasses:** Where we look as we form a grasp.
- **Microsoft Kinect:** Depth data used to reconstruct human grasps and track object movement.
- **Barrett Hand and Arm:** Used to collect human defined robot grasps.

Data Collection
- **Eye Tracking Glasses:** Gaze data provides insight into visual cues used when forming a grasp. Used to compare human vs robot trials.
- **Grasp Range:** Extremes for each grasp specified can be used to improve machine learning by establishing a range for which a grasp works or doesn’t work.
- **Robotic Grasps:** Human defined robotic grasps can be compared to computer generated grasps.
- **Good vs Bad:** Robotic and human grasps from good and bad trials can be used to evaluate future robotic grasps.

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