Open Up!
Towards the Use of Human strategies
to address pose uncertainty
in grasp planning

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The Problem:

Start conditions

Goal conditions
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WHY IS IT SO HARD?

- Perceptual errors
- Actuation errors
- Modeling errors
- And so the list goes...
How do WE solve the problem?
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We vary our hand aperture according to the uncertainty perceived!
Propose: Vary hand aperture along the execution of reach movement

Algorithm 3: OpenHand$(d)$

\[
\text{if } 1 - d \leq MGA \text{ then} \\
\quad \text{return } c + \frac{(1 - d)}{MGA} [ (b - c) + (w - b)u ] \\
\text{else} \\
\quad \text{return } b + (w - b)u
\]
Results: Grasps feasible in presence of mild perception errors