

## FAILURE IDENTIFICATION BENCHMARK

Reference No / Version	B2-v1.0
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Adopted Protocol	Underactuated hand modeling protocol (P1-v1.0)
Scoring	<p>If performed on simulation or on a new system: Record test paths, for each object, given 50 sequences of actions (given in the website):</p> <ol style="list-style-type: none"><li>1. Position an object in the grasp region.</li><li>2. Close fingers until they reach load of 100 (in Dynamixel units).</li><li>3. Stream sequence of actions in 10Hz to the actuators.</li><li>4. Record state of system in 10Hz.</li><li>5. Store the last state-action that leads to fail and label as <i>fail</i>.</li><li>6. Store an arbitrary state-action pair along the path and label as <i>success</i>.</li><li>7. Repeat 1-6 for all action sequences.</li></ol> <p>If used on the provided (RUM) dataset, use prerecorded labeled validation data.</p> <p>Classify each of the 100 state-action pairs. Scoring would be the overall classification success rate and the confusion matrix for each object as seen below.</p>
Details of Setup	Described in the protocol.
Results to Submit	Confusion map for each object.