**Success/Failure Conditions: GA4HDL**

**DRACO LAB**

**Robert Lee**

**17 June 2025**

**Introduction:**

To produce a conclusion for this project, the conditions must be defined for success and failure of each test. Throughout the duration of testing the success of a single run can be determined each time the algorithm is iterated; The average ratio of successes to failures can be utilized to determine if the algorithm overall is a success or failure.

**How Success is Defined:**

* Solution is found which meets the criterion set at the beginning of the test
* Solution is found within a reasonable amount of time
* Solution is found within a reasonable number of generations
* Solution found is verifiable and tested on an FPGA

**How Failure is Defined:**

* Solution does not meet the criterion set at the beginning of the test
* Solution is not found within a reasonable amount of time
* Solution is not found within a reasonable number of generations
* Solution found cannot be verified or tested on an FPGA