HyperLoop Computing Systems Statement of Requirements

Lead Engineer: Travis Norman

Test Engineer: Sam Pangestu

Safety Engineer: Ahmed Alwakeel

1. System must successfully turn on and properly initialize all subsystems.
2. Mag-Lev Arrays Manipulation
   1. System should be able to both raise and lower arrays.
   2. System should default arrays to safe position, in case of system failure.
3. Disc Brakes Application
   1. System should be able to effectively apply disc brakes.
   2. System should allow of integration of system developed by controls group for overall operation of disc brakes.
   3. System should apply brakes in the event of a system failure.
4. System should be able to accurately receive and interpret sensor data.
5. System should be able to accurately and precisely determine both speed and position of pod.
6. System should remain stable at all times after turn on.
7. System should be able to communicate between microprocessors of other subsystems and monitor their condition.
8. System should minimize its own power consumption.
9. System should include fail safes in case of system failure.