The Globetrotters Notes – 3/9/17

# Hugh Comments

* Explain all used libraries to everyone on the team
* Pyautogui – Look at Hugh’s previous team Data
  + -Request Hugh’s Previous Team’s Data
* PIC24F- Power
* PIC24E- Faster
  + Has DMA
  + Need a Reason why we chose it and it will be detailed in the Final Report
* Characterize the Analog System before we construct the Digital System
* Symmetrical IR Sensors (4 ways)
* Time or Flight Sensors
  + Can get Optical Sensors
  + Can use 4 of them to get measurements for height and Horizontal placement
  + Respond at the speed of Light
* Arm Cortex microcontroller (**ST)**
  + Flight Sense
  + I2C
* Biggest Issue with PID
  + Timing (Delays)
* Darlington Transistors Array are Outdated
* Microchip has free code for their products
* **Use an H-Bridge to Drive a coil**
  + Used for driving the current in 2 directions
  + Used for Pushing and Pulling Forces
  + Mosfet has H-Bridge pre-built in them
    - Great for us!!!
* Get a Mosfet with Low Rd
  + Used to output low current
* Measure the PWM Frequency of the Levitation Devices that we already have
  + Measure on the switches
* Globe Material
  + Microballoons
  + Poly-Carbonate Materials
* Start Ordering Parts and Materials and start Testing!!!!!!!
  + Sensors
  + Magnets