Weekly reports are to be emailed to atbecker@uh.edu by 5:00pm on Tuesdays. The purpose of a weekly report is to: (1) give you text and images for your papers, thesis, and dissertation, (2) document progress, (3) identify if you are stuck or need resources.

Weekly report

1. **My *Goals* from last week**

*Project 1* <Kilobots Matlab>

*Project 2* <Object Manipulation Simulation>

* Finish the following simulations and plots before Friday:
  + Object Density
  + Brownian Noise
  + Shapes

*Project 5* <Object Orientation Matlab>

*Project 4* <Object Orientation Simulation>

*Project 4* <Mean Game>

* Assign Mahek tasks for mean game
* Goal Milestones:
  + Creating Obstacles
  + Applying constant flow to robots through the obstacle
  + Semi-dart scoring board at the bottom/ scoring algorithm
  + Add user interface/ Go button/ Instructions

*Project 5*<Miscellaneous>

* + Attend Houston Robotics Day
  + Reach out to computer science professors willing to guide my senior design team.

**My *Accomplishments* this week**

*Project 1* <Kilobots Matlab>

*Project 2* <Object Manipulation Simulation>

* Finish the following simulations and plots before Friday:
  + Object Density-done!
  + Brownian Noise-done!
  + Shapes-done!
  + Shiva is making the plots
* Features I added:
  + Unsticking: when the mean is in the same place for 10 seconds, it moves the swarm. This eliminated run time errors.
  + Region Robot Count: When the robot count for a region is fewer than 50, the program directs the robots to a corner. It determines the corner by seeing which region has the most and second most regions; this keeps the majority of the swarm together.

*Project 5* <Object Orientation Matlab>

*Project 4* <Object Orientation Simulation>

*Project 4* <Mean Game>

* Assign Mahek tasks for mean game -Haven’t done this
* Goal Milestones:
  + Creating Obstacles
  + Applying constant flow to robots through the obstacle
  + Semi-dart scoring board at the bottom/ scoring algorithm
  + Add user interface/ Go button/ Instructions
* Mahek update: My interaction with her is better. She’s helping out Lillian and comes to me for questions about her torque game. She’s planning to stay until 8/14 and that’s fine. I don’t see her as a hindrance anymore and am happy for her help and to help her.

*Project 5*<Miscellaneous>

* + Attend Houston Robotics Day Super day event
  + Reach out to computer science professors willing to guide my senior design team. Meet a new rice professor!
  + Senior Design Update:
    1. we’ve found a potential co-advisor, Hein Van Nguyen
    2. Proposal: Create a machine learning algorithm to learn the intentions of game users playing on swarmcontrol.net and to replicate the strategies by using only the learned algorithm to play the game.

1. **My *Goals* for next week**

*Project 1* <Kilobots Matlab>

*Project 2* <Object Manipulation Simulation>

* Create success percentages for
  + A base simulation
  + A simulation implementing regions
  + A simulation implementing regions and flow around
* Review the publication for concept redundancy
* Clean up the simulation code
* Add updated simulation snapshots to publications
* Update accurate pictures in my section

*Project 5* <Object Orientation Matlab>

*Project 4* <Object Orientation Simulation>

*Project 4* <Mean Game>

* Assign Mahek tasks for mean game
* Goal Milestones:
  + Creating Obstacles
  + Applying constant flow to robots through the obstacle
  + Semi-dart scoring board at the bottom/ scoring algorithm
  + Add user interface/ Go button/ Instructions

*Project 5*<Miscellaneous>

1. **What I need Dr. Becker to do:**

* Letting me know if there’s anything I can do in regards to doing senior design with Hein.
* My ten weeks that SURF is paying me for ends this Friday. I started before SURF officially started to help Shiva finish experiments for May. I plan on staying until 8/12. Can I get on the hourly payroll? I still need to submit my forms to the nice HR lady.