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

- Circular Convergence
- IROS/URD Poster
- MATLAB ROS Finishing

2. My Accomplishments this week

- a. ClosestFrontier_VAF
 - i. Performed 10 trials on VAF and normal ClosestFrontier for particle sizes from 100 to 1400.
 - ii. The ClosestFrontier_VAF shows more bounded performance with a lower maximum and higher minimum
 - iii. There seems to be a critical mass around 600 particles where the maximum trend doesn't go down.

b. CircularConvergence

- i. Added the PropagateButton,
 - 1. Polygon covering with the mask seems to be somewhat off still when disp(error) gets too high
 - 2. Need to make a final arc distance metric
 - 3. Functionalization still might be needed

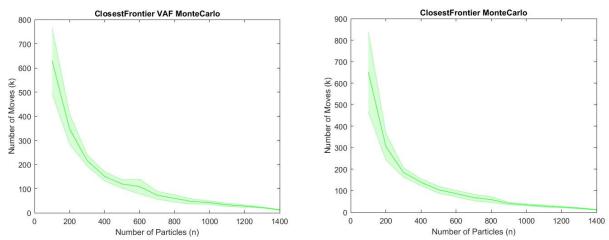


Figure 1: The two plots of our ClosestFrontier(right) and our ClosestFrontier_VAF(left). They both converge to

3. My Goals for next week

- Finish Continuous Simulation, add algorithmic control
- Finish polygonal propagation and calculations
 - a. Met with Dr. Becker yesterday

4. What I need Dr. Becker to do:

a. Have fun in downtown tomorrow