

Reflection Blog Post

Fuzzy Controller Project

My experience:

In the beginning, when I first hear this project's description, I thought it would be easy. Just rotate to face the goal in the first 100ms. Then just jump to the finish in one 100ms move. But after learning about fuzziness and realizing that the point of this project was to not give the controller precise controls, I began to learn how difficult this project would be. But in my experience, this was an amazing learning experience for me. I had to develop a fuzzy controller, with no initial knowledge of fuzziness, from absolute scratch, in Matlab which I have never used before, and with instructions that were purposefully vague. I am proud that I completed this assignment while learning at least 3 new skills along the way.

Challenges:

I did not have any experience in Matlab before starting this class. I spent the first 2 weeks of the class doing problems on codey, before I seriously even looked at the project. I believe learning this whole new environment was the hardest challenge for me. But that was not the only challenge. At points in time, trying to wrap my head around the concept of fuzziness made it want to split in two. The example you gave in class with the thermometer really helped me understand and overcome this challenge.

Easy things:

Honestly, there is no part of this assignment that I would consider easy. Everything pushed me out of my comfort zone, which I believe to be a good thing.

A spot for potential improvement:

I have a Speed Control Option for maintaining the speed of the robot with a value of 0. Now I realize it is redundant.