

# ME455 Active Learning HW4

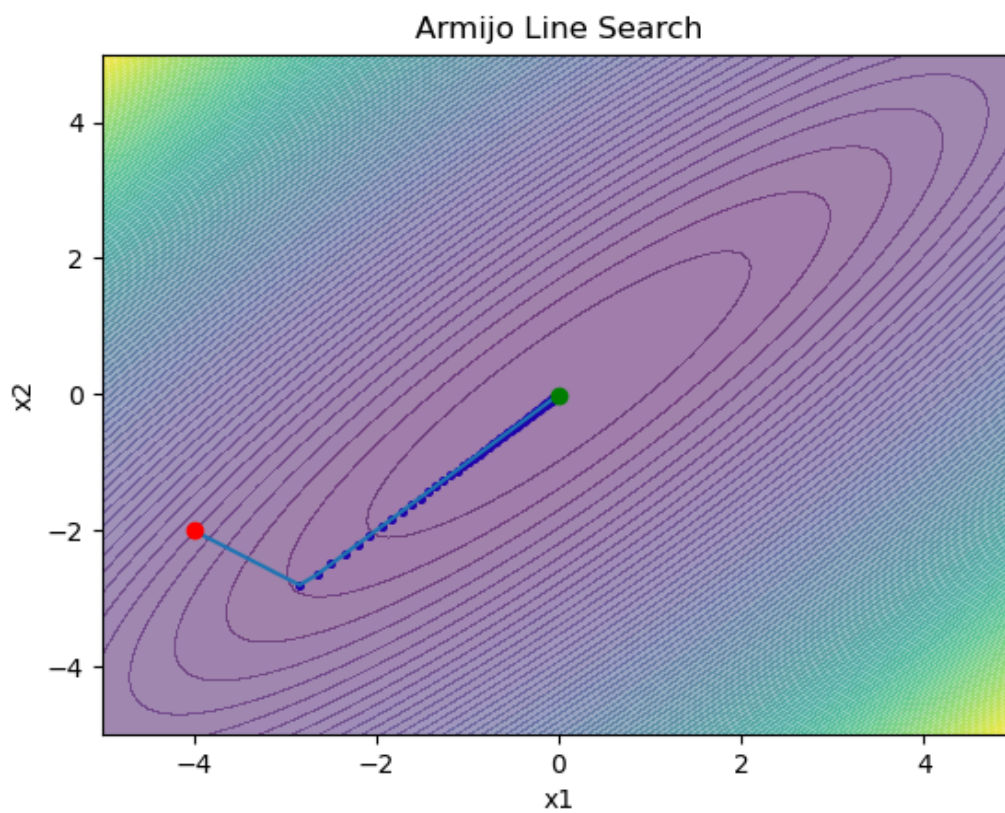
Graham Clifford

5/9/2024

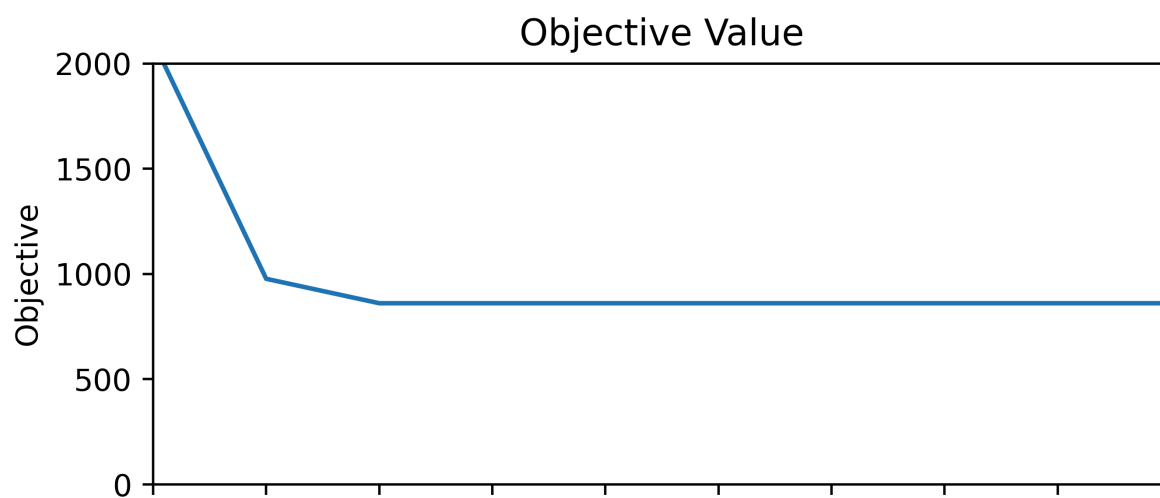
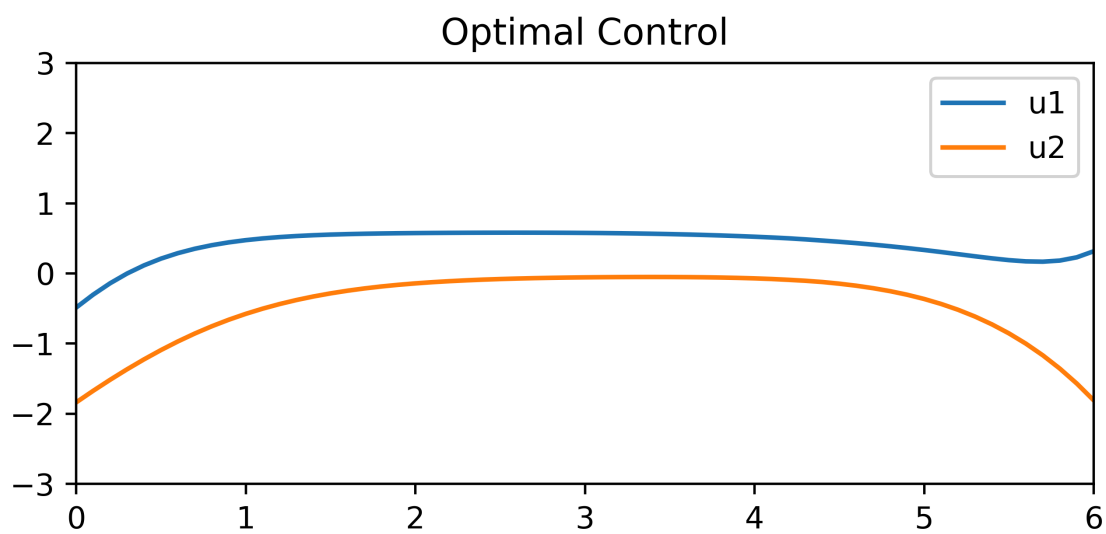
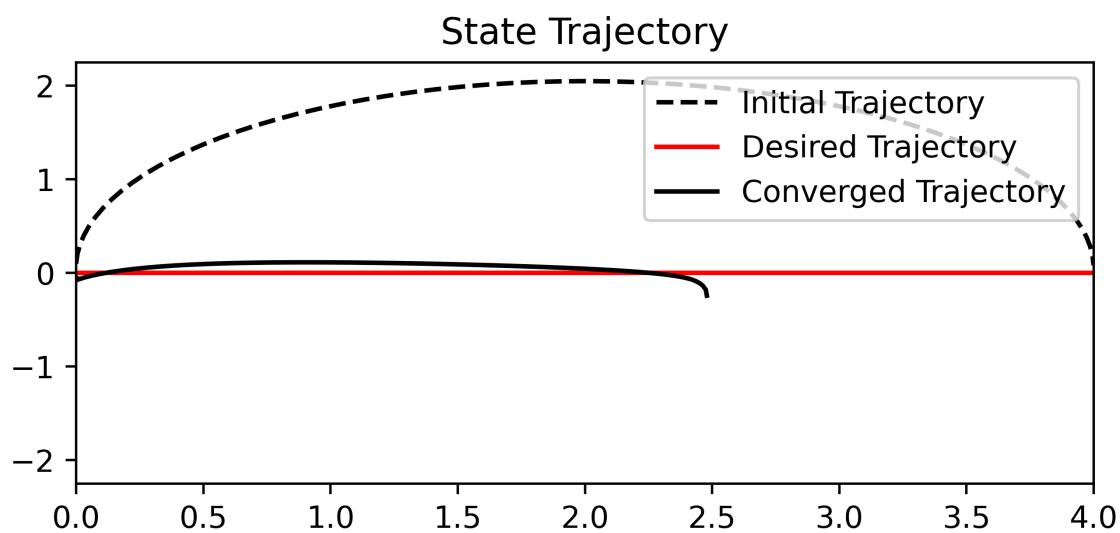
## Problem 1

Please see handwritten pages for problem 1.

## Problem 2



## Problem 3



0      1      2      3      4      5      6      7      8      9  
Iteration

I'm not really sure why I couldn't get my plots to look like the example plots, however I think there must be something wrong with either my iLQR algorithm or the way I calculate my loss. I'm doing my iLQR algorithm where I calculate the cumulative loss for the entire trajectory with the current control sequence, as well as the cumulative loss for the entire trajectory with the modified control sequence ( $u + \alpha * \gamma$ ). Maybe this is wrong, but it seemed to me like the example code was encouraging this strategy. This leaves me with a loss that plateaus at 1000, which is kinda weird.