

## Assignment #6

**Due Tuesday, 29 October 2019, at the start of class**

This Assignment is based on Chapter 7 and 8 material. Make sure to read the beginning of Chapter 8, namely sections 8.1–8.4.

Remember that when you turn in homework problems involving MATLAB/OCTAVE, the following two expectations always apply:

1. The commands that you used must be shown, along with the results.
2. Please strive to minimize use of paper while answering the question.

**Do the following exercises:**

### CHAPTER 7

- Exercise 14 on page 178. (*Hint: This is only a few lines of MATLAB, but you will have to think about how to build them. You can use `vander()` to build the matrix  $A$ . Before doing the full job, work out, and visualize using `polyval()`, a lower-degree example such as a degree 2 polynomial through 7 points on the graph of  $b(t)$ ; of course, don't turn that in. The results you should show are your code and the 11 polynomial coefficients from each part.*)
- Exercise 16 on page 179.

### CHAPTER 8

- Exercise 1 (a) and (b) on page 207.
- Exercise 2 on page 207.
- Exercise 4 (a) and (b) on pages 207–208.
- Exercise 7 (a) and (c) on pages 208–209.