

# Analysis of Algorithms

CS 375, Fall 2018

Homework 5

Due **AT THE BEGINNING OF CLASS** Monday, October 1

- **Reading Assignment:** From your textbook (Levitin), please read Ch. 3.1–3.4.
- *A general note:* When writing up your homework, please write neatly and explain your answers clearly, giving all details needed to make your answers easy to understand. Graders may not award credit to incomplete or illegible solutions. Clear communication *is* the point, on every assignment.

## Exercises

As usual, please give short explanations for each answer (and show your work on calculations, where relevant).

1. Exercise 3.1.4, parts a, b. (For this exercise, consider a polynomial to be represented by an array containing its coefficients.)
2. Exercise 3.2.1. **NOTE:** The average case analysis in section 2.1, pages 47-49, may be helpful for part b.