## CS 3824 Homework Assignment 6

Given: November 30, 2011 Due: December 8, 2011

General directions. The point value of each problem is shown in []. Each solution must include all details and an explanation of why the given solution is correct. In particular, write complete sentences. A correct answer without an explanation is worth no credit. The completed assignment as a PDF must be emailed to heath@vt.edu by 4:00 PM EST on December 8, 2011. No late homework will be accepted.

This homework is **optional.** If you do submit it, your lowest homework grade will be dropped.

Digital preparation of your solutions is mandatory. Use of LATEX is optional, but encouraged. No matter how you prepare your homework, please include your name.

## Use of LATEX (optional, but encouraged).

- Retrieve this LATEX source file, named homework6.tex, from the course web site.
- Rename the file < Your VT PID>\_solvehw6.tex, For example, for the instructor, the file name would be heath\_solvehw6.tex.
- Use a text editor (such as vi, emacs, or pico) to accomplish the next three steps.
- Uncomment the line
  - % \setboolean{solutions}{True} in the document preamble by deleting the %.
- Find the line \renewcommand{\author}{Lenwood S. Heath} and replace the instructor's name with your name.
- Enter your solutions where you find the LATEX comments
  % PUT YOUR SOLUTION HERE
- Print out and submit your solutions by 4:00 PM on December 8, 2011.

## [100] 1. Jones and Pevzner problem 11.4.

Assume that the first state is  $\alpha$ .