

CS 4410 Study Guide for Midterm

Date: Midterm 10-30-17

The test will cover sections: 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1

You may bring on 8.5x11 inch paper with writing on one side in your own handwriting

I will provide the test and scratch paper

Study:

Homework problems

Notes

Examples in book

Some things you should be able to do (intended as a guide, not an exclusive list):

- Induction proofs using recursive definitions. See section 1.2, problem 3, for an example.
- Know definitions and properties of:
 - DFAs,
 - NFAs,
 - Regular Languages (RL),
 - Regular Expressions (RE),
 - Regular Grammars (RG)
- Algorithms to know:
 - NFA \rightarrow DFA
 - RE \rightarrow NFA
 - RG \rightarrow NFA
 - RL \rightarrow RG
- Closure properties of RLs