Wrap-up
CSCI 338

Final Grades

1. Test 3 (AVG = 81.52%, MED = 90%)
2. All grades are in. Check for issues.
3. 'Current Final Grade' in D2L is the final letter grade you get if you do not show up to the final. (AVG=88%, MED=90%)
4. 'Current Final Grade' curved as follows:
   1. Replaced your Final Exam Grade with the average of you best two test grades.
   2. Dropped your lowest test.

Example: Test 1: 75% Test 2: 85% Test 3: 90% Final: 0%
             Test 1: 75% Test 2: 85% Test 3: 90% Final: 0% 87.5%
             Test 1: 75% Test 2: 85% Test 3: 90% Final: 87.5%   Exam AVG = 87.5%

Final Exam Logistics

1. If your 'Current Final Grade' is an A, do not come to the Final.
2. Wednesday May 8th from 10:00-11:50 am in normal room.
3. You can bring your book and any notes you would like, but no electronic devices.
4. You may assume anything proven in class or on homeworks unless specifically told you can't.
5. ~15-20 questions:
   1) Conceptual questions (short answer).
   2) Simple problems (easy proofs).
   3) Harder problems (longer proofs).

Conceptual questions

- What kind of problems do DFAs solve?

- What can an NFA do that a DFA cannot?

- Can we currently solve NP-Complete problems?

- What is the running time to sort a list of arbitrary numbers?

- What is a complete graph?

- What is an epsilon transition in an NFA?

- What do we call "unsolvable" computational problems?

- How does the Pumping Lemma work?

Simple Problems

- Show problem X is decidable.

- Show problem Y is in the set P.

- Show problem Z is in the set NP.

- Show language W is a regular language.

- What language is described by the following NFA: ____

- Prove that the union of regular languages is regular.

- Prove that the complement of languages in P are also in P.

Harder Problems

- Show that problem X is not regular.

- Show problem Y is undecidable.

- Show problem Z is in the set NP-Complete.

- Prove that P $\neq$ NP.