© 2018 Sudarshan S. Chawathe

Today HW01 due. Regular expressions, equiv. to FSAs, nonregular languages. § 1.3, 1.4. **Next class** Quiz 01. Regular-languages wrap-up.

- 1. List the members of your group below. Underline your name.
- 2. Prove or disprove the regularity of each of the following languages.
 - (a) Alphanumeric strings that do not have **boo** as a substring.
 - (b) $\{0^n 1^n \mid 0 \le n \le 3\}$
 - (c) Binary strings with an equal number of 01 and 10 substrings.
 - (d) Strings of the form sss, for all binary strings s.

3. Provide FSAs equivalent to $a(d \cup a)^*$ and $(a \cup b \cup c)^*(ab \cup ba)$. Ensure you can provide DFAs, but NFAs are OK for now.