

# Lecture #3: DFA Design and Verification — Part One

## What Will Happen During the Lecture

### Remember... You Had Homework!

Students were asked to work through the following set of lecture notes before this lecture.

- Lecture Notes — “DFA Design and Verification — Part One”.

Once again, you may attend the lecture presentation if you have not worked through this material ahead of time — but it will not be repeated for you, and you might get a little bit lost, during the presentation, if you haven't worked through this.

### Problem To Be Solved

Let  $\Sigma = \{a, b\}$  and let  $L \subseteq \Sigma^*$  be the following language:

$$L = \{w \in \Sigma^* \mid w \text{ ends with } abb\}.$$

During the lecture, the design process introduced in the preparatory reading will be used to design a deterministic finite automaton that has this language.

### If You Want To Get Started . . .

Try to solve this problem on your own, after completing the required reading (and looking at any supplements that might be helpful). Then you can compare your work to what the instructor is presenting.