

## COT 4210 Quiz #0

Due 1/15/2021

**Note: This quiz will count as a small portion of the quiz grade. Specifically, it will count for 1% of the course grade and the value of Quiz #1 will be reduced accordingly to be worth 9% of the course grade. Also, this quiz will serve as proof of course activity for Financial Aid. (The homework assignment may serve this purpose as well, since you can submit this by Friday also.) In addition, the goal of this quiz is for you to practice scanning in a document to .pdf and submitting quickly.**

1. (5 pts) Draw a DFA that accepts strings over the alphabet  $\{0, 1\}$  that start with 00 or end with 11. (Thus, 0010101 and 01010011 are in the language, but 010001 is not.) In your drawing, clearly indicate which state is the start state with an arrow outside the state, which states are accept states, as well as each transition for each ordered pair of state and alphabet character. (Thus, if your drawing indicates  $n$  states, then you should have  $2n$  transitions indicated via the appropriate directed edges.)