



# Lecture 37: A Universal Computer

PS8 returned at your  
project design review  
meetings

Remember to email your  
project descriptions  
before midnight tonight

# Turing Machine: FSM + Infinite Tape

- Start:
  - FSM in Start State
  - Input on Infinite Tape
  - Tape head at start of input
- Step:
  - Read current input symbol from tape
  - Follow transition rule from current state on input
    - Write symbol on tape
    - Move L or R one square
    - Update FSM state
- Finish: Transition to halt state

# Turing Machine

