Checklist
Justin
Non-Verilog
  • Get accelerometer and gyro A/D output on scope to characterize signal for Walk and
    Look modules
  • Get gyro to output angular velocity of head movements
  • Getting A/D to process analog gyro data into digital data
  • Get accelerometer to output acceleration of leg movements
  • Get A/D to process analog accelerometer data into digital data

Verilog
  • Create module to interpret digital gyro data as head position
  • Create module to interpret digital accelerometer data from A/D as head position
  • Create module to control A/D data request
  • Create module that sends reading requests to A/D

Christy
Non-Verilog
  • Test PS/2 protocol implementation by connecting PS/2 output wires to labkit output and
    see if:
    o keystrokes appear in text editor on computer
    o mouse moves on screen
  • Hook up push-buttons to prop gun and have them output a pulse for every button press
  • Hook up BJT open-collector circuit for connection between labkit and computer

Verilog
  • Create counter module output proper timing pulses for PS/2 protocol
  • Create module to output data correctly using the PS/2 protocol
  • Create Modelsim test jig to simulate various inputs and the corresponding outputs of PS/2 module
  • Create module to collect push button data from prop gun as pulses
  • Help develop and debug algorithm to interpret accelerometer and gyro data into head and leg movements