

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:
 - keystrokes appear in text editor on computer
 - 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