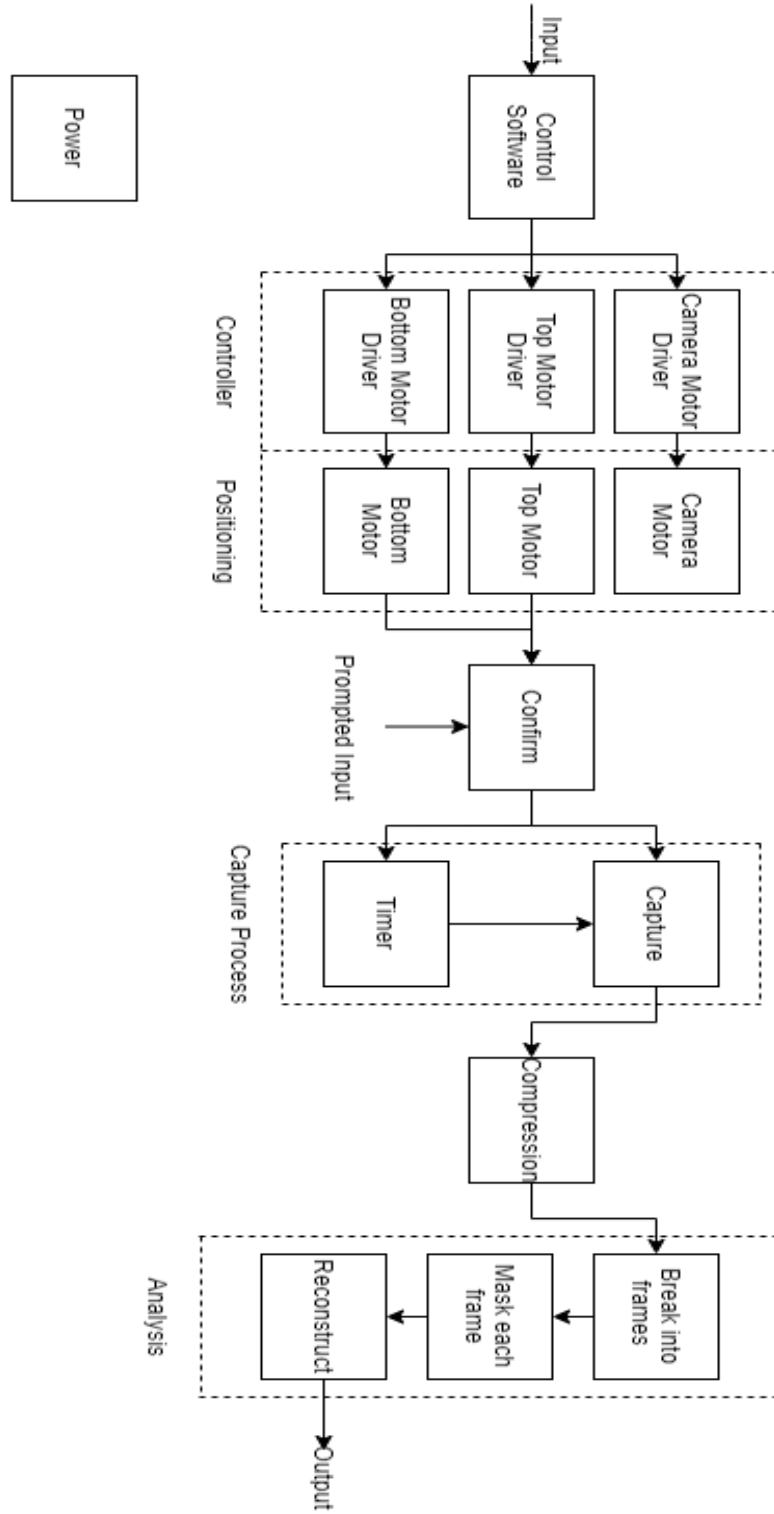


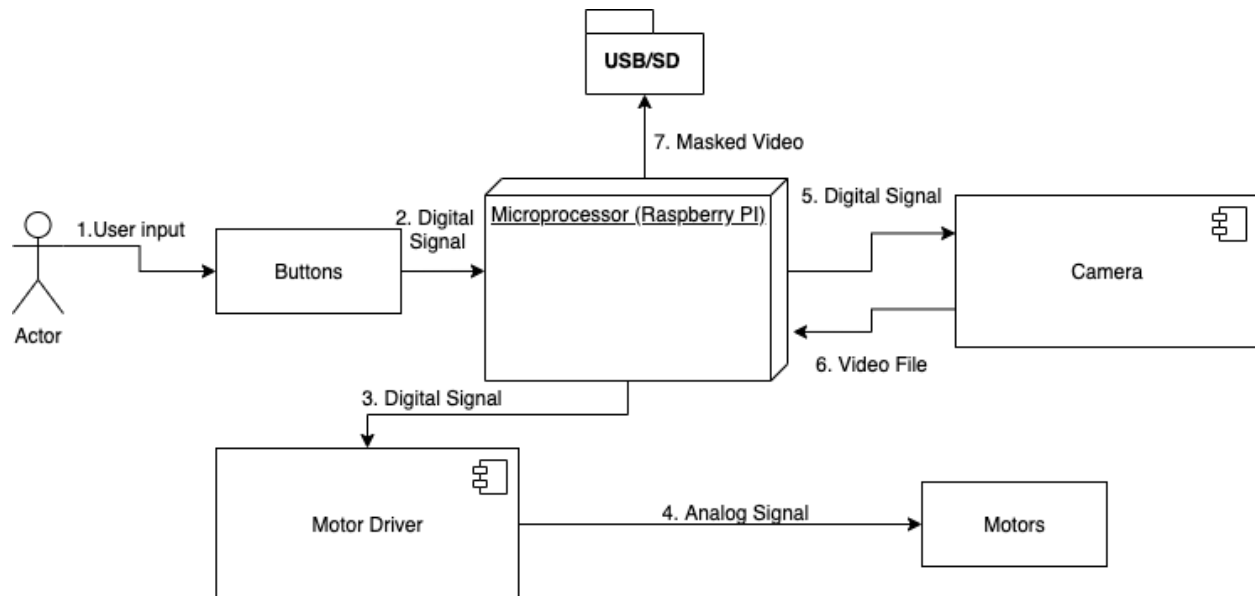
Module Interface

1. Control Software
Receives input from the user (i.e. weight, height, body part to be analyzed).
Sends voltage signal to drivers for positioning.
2. Motor Drivers (Controller)
Receives voltage signal in order to determine how to move the motors. Sends voltage signal to motors
3. Motors (Positioning)
Motors rotate for as long as determined by drivers.
4. Confirmation
User determines whether motors have adequately positioned camera height.
User the inputs Y/N.
5. Capture Process
Records footage for a predetermined amount of time. Sends footage to compression software.
6. Compression
Receives video file and compresses the file size for faster analysis. Sends out compressed video file.
7. Analysis
Receives compressed video file and breaks it up frame by frame. These frames are then analyzed and masked by Machine learning algorithm. The video file is then reconstructed with masked data and outputted to a SD/USB port.

Level 2 Functional Decomposition



Hardware Organization



Software Organization

