

## Embedded Microcontroller Design Project

### Wireless eData – Safety Harness Device

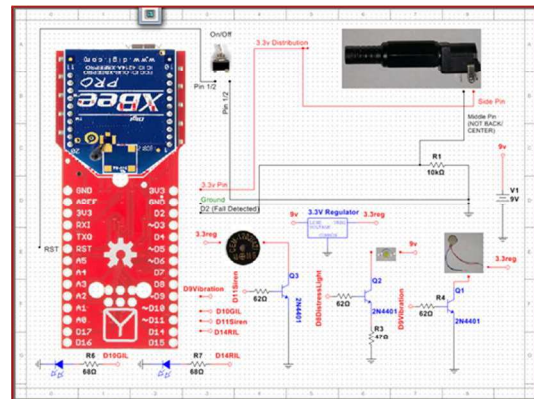
#### Mission Statement

The Wireless E Data team aims to create an inexpensive wearable device that promotes fall safety and awareness in “high-elevation” construction sites.

#### Synopsis

The goal is to design a device that sends a distress signal from the harness when a construction worker has fallen or presses their panic button. The device incorporates the Arduino microcontroller and Xbee radio communications chip.

The Wireless E Data Project exploits the power of the Arduino and XBee radio chip to create a peer to peer emergency alert system. When attached to a safety harness our device can detect when a worker has fallen. During a fall the device will alert all other workers in the area by producing an alarm, flashing a strobe light, and also causing all the other devices to vibrate. These alarms continue until all devices on the network are power cycled.



O'Donovan Murphy II Gateway CC  
 Gustavo Sazo Norwalk CC  
 Oghomwen Ohenhen Manchester CC