

Poster Project Proposal Form

Students

Names: Aaron Rito

Date: 10/26/14

Project Title :

LED Bike Helmet Cover with turn signals and stop sign.

Special Equipment/Requirements: Arduino Lilypad USB, Lilypad LED's, Polymer Lithium Battery, conductive thread, bike helmet cover..

Student Signatures:

External Contact Information (The term "external" in this context refers to external to the EET Department at PCC. Also, the external contact is only required to specify a possible project and is not required to follow, contribute to, or evaluate the ongoing project.)

Name: Adrian Lohsene

Department/Company/Organization: Santiam bicycles

Email:

Phone Number: 503 431 2694

External Contact Signature:

Project Description (Use the back of the sheet if needed.)

A bike helmet cover with LED turn signals and stop sign. The lights will be controlled via the Lilypad USB micro-controller and a 3 button control panel. The initial design will have a wired control panel, but ultimately the controls will be wireless and installed on the handlebars of the bike. When the rider hits a button, the corresponding turn signal will blink, and turn off when pushed again. If both turn signals are activated at once, the jacket will do a nifty light show for visibility. The premise is that a helmet cover is highly portable and does not require the rider to use the same equipment (like a jacket or lights permanently installed on a helmet). The unit will be powered with a polymer lithium battery and will be USB rechargeable.