



**STEVENS**  
INSTITUTE *of* TECHNOLOGY  
THE INNOVATION UNIVERSITY

# Homework 3

February 10, 2013

CPE-322, Engineering Design VI

Paul Di Santi

I pledge my Honor that I have abided by the Stevens Honor System.

Paul Di Santi      x\_\_\_\_\_

## Homework 3

### *Projects of Interest*

<b>Project Definer</b>	Stanley Switalski
<b>Name of Project</b>	LED Patch Panels
<b>My Potential Contribution</b>	Help in the design of the specialized patch panel as well as the test tool needed along with the patch panel
<b>Suggestions of possible adjustments</b>	Add some sort of software solution that could also help identify which port on the patch panel lights up once the tester is plugged in. This will eliminate the need to have a second person standing at the patch panel to identify the corresponding port.
<b>Would I be willing to work on it?</b>	Yes

<b>Project Definer</b>	Takahiro Akiyama
<b>Name of Project</b>	Language Translator App
<b>My Potential Contribution</b>	Help with code (particularly for the android application) for the translation component
<b>Suggestions of possible adjustments</b>	Have the application contact a server to conduct the translations and effectively complete the “computing.” If the smartphone does not have internet access, include an option to download an offline component for each language you wish to be translating to/from.
<b>Would I be willing to work on it?</b>	Yes

<b>Project Definer</b>	Joseph Vieitez
<b>Name of Project</b>	Smartphone Controlled A/C Unit
<b>My Potential Contribution</b>	Help with code (particularly for the android application) for the AC control component
<b>Suggestions of possible adjustments</b>	Include a web based UI as well that has the same exact functionality as the app. This would allow for control of the A/C from anywhere in case a smartphone is not accessible
<b>Would I be willing to work on it?</b>	Yes

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<b>Project Definer</b>	Kaminski, Gregory
<b>Name of Project</b>	Self-Balancing Ball-bot
<b>My Potential Contribution</b>	Help with coding and configuration of the ball bot to be used in a variety of situations
<b>Suggestions of possible adjustments</b>	Perhaps use some sort of “track” system in situations where balance could be an issue for robots going on the same path multiple times
<b>Would I be willing to work on it?</b>	Yes

<b>Project Definer</b>	Eric Pantaleon
<b>Name of Project</b>	Cell Phone Guitar Amp
<b>My Potential Contribution</b>	Help with coding and configuration of the app
<b>Suggestions of possible adjustments</b>	Rather than use the phone’s speaker to play the sounds from guitar, have the ability to go through a separate set of speakers through Bluetooth. Also add the ability to go through a traditional Amplifier/speaker while the app handles any sort of audio processing/distortions.
<b>Would I be willing to work on it?</b>	Yes