Proposal Presentation

Team Rocket:
Jennifer Chun, Andrew Obatake, Emily Lum

Overview of Project

- Weatherbox collects data which will be used to forecast solar irradiance patterns
  - Patterns used to determine places to install PV for microgrid
- Build the weatherbox given the following schematics:
  - Should accurately measure and relay data
  - Work for 2 days without sunlight
    Solar irradiance, temperature, humidity, and pressure sensors
- Create a device that can be used in a variety of places
  - Low-cost to allow easy access to the technology

Motivations

Hawaii is very dependent on outside sources for energy

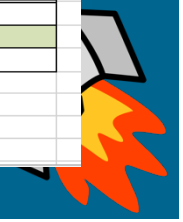
More efficient use of solar energy can lead to lower electricity costs and less dependency on unsustainable sources

Use the data provided by the weather box to assist in the planning of solar panel placements and building designs

Gantt Chart

	Project (Gantt Chart)															
Week	1	2	3	4	5	6	7	8	Spring Break	9	10	11	12	13	14	15
Date	1/25/2016	2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016	3/14/2016	3/21/2016	3/28/2016	4/4/2016	4/11/2016	4/18/2016	4/25/2016	5/2/2016	5/9/2016
Presentations																
Proposal																
Design																
Final																
Demonstration																
Training																
Git/GitHub																
Arduino/Bare Arduino																
Eagle																
Modules																
Microprocessor																
Sensors																
Charging Circuit																
Xbee																
Build																
System Integration																
Overall System Firmware																
Design/Print PCB																
Housing																
Test																
Debug																
Reports																
Final Report																

Finish Weather-boxes by the end of



Goals

- Create a working weatherbox
- Improve programming skills
- Learn more programming languages
  - C++, Python
- Learn how to use CAD software
  - Eagle (designing PCBs)
- Improve communication/presentation skills

Any questions?