

# Featuring...

# Ryan Li





## Kevin Liu

# Jonathan Tu





## Jason Yim



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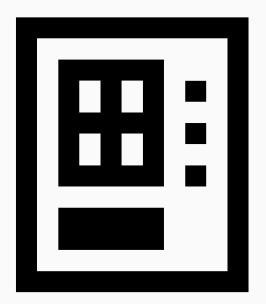
#### Lab Motivation

- Transform UH Mānoa into a microgrid
- Use renewable energy for sustainability
- Reduce current energy costs
- Monitor and predict intermittent weather

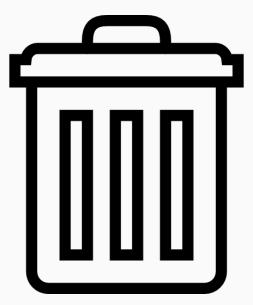


#### **Project Overview**

Gather Data from Vending Machines



Create an Interactive Trash Can



#### Vending Machine: Project Overview

- Monitor power consumption
- Reduce energy costs
- Analyze accumulated data to promote efficient usage of energy



#### Smart Can: Project Overview

- Promote sustainable living
- Decrease the pollution in our community
- Make recycling more interactive
- Create a functioning Smart Can



#### **Planned Goals**

- Create a functioning Smart Can
- Acquire workplace skills
- Obtain technical skills
- Experience the design process
- Learn about renewable energy



Reports

**Vending Machine** 

Final Report

Order Parts

Experiment Data Organization

Projected Timeline																
		Project														
2		(Gantt Chart)														
Week	1	2	3	4	5	6	7	8	9	Spring Break	10	11	12	13	14	15
Date	1/23/2017	1/30/2017	2/6/2017	2/13/2017	2/20/2017	2/27/2017	3/6/2017	3/13/2017	3/20/2017	3/27/2017	4/3/2017	4/10/2017	4/17/2017	4/24/2017	5/1/2017	5/8/2017
Presentations																
Proposal																
Preliminary Design																
Critical Review																
Final																
Training																
Arduino																
Modules																
Microprocessor																
IR Sensor (Lid)																
IR Sensor (Full)																
Motor (Lid)																
Speech Synthesizer																
Build																
System Integration																
Overall System Firmware																
Housing																
Test																
Debug																

FINAL REPORT DUE

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### Thank you for listening!

Any Questions?