



MARCH 10

Rainfall and Irrigation

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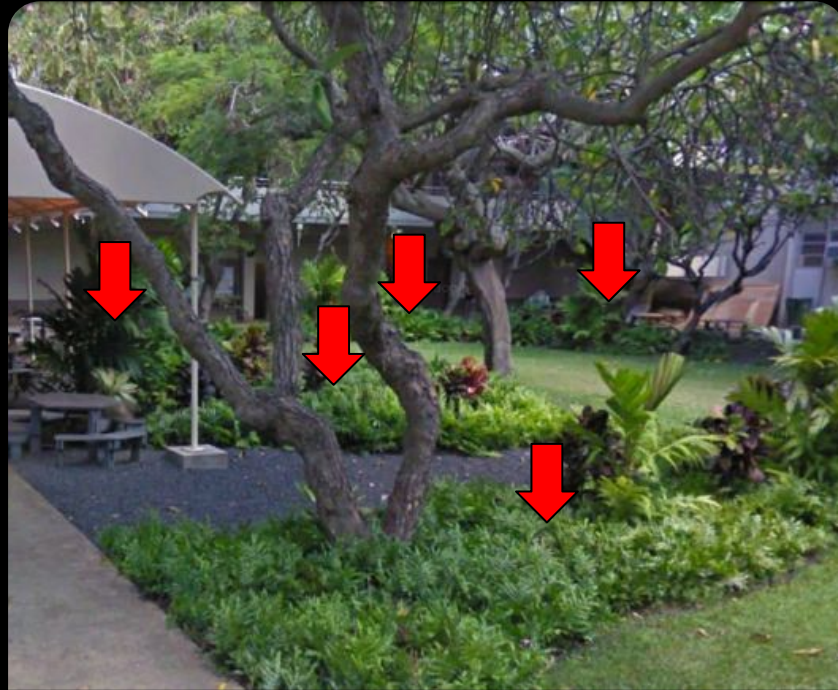
Pick an environment, rationale, challenge

- HIG Courtyard uses sprinklers to remain green and lush.
 - Time and duration?
 - Does Not take into accounts rainfall
 - Overwatering
 - Underwatering
 - Set off sprinklers only when needed

Come up with physical/chemical measurements needed

- Soil
- Moisture
- Temperature
- Rainfall
- Humidity

Draft spatial sampling regime



Draft temporal sampling regime

- Every hour
 - Hawaii is humid and evaporation occurs
- At 6pm or around sunset, sprinklers are turned on based on day data

Draft parts, vendors & costs

- Raspberry Pi - Free
 - Solar Panel?
- Soil Moisture Sensor - 10
- Temperature and Humidity Sensor - 10
- Rainfall/Precipitation Sensor - 10
 - Bucket - Free
- Irrigation/Sprinkler automator - 20-100

TOTAL: 150