



Sensor Pod

Taiwan Forestry Research
Institute

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Proposed Research

- To set up an Android-based system that will monitor the aspects of a rainforest, such as humidity, temperature, and wind direction.
- Use Samsung Galaxy Nexus to capture audio, pictures, and videos.
- Use DataTurbine to send any captured media from the rainforest to different stations for more analysis.
- Use an IOIO board to maintain and be the basis of the sensors.

Progress (for Week 1)

- Visited the Lienhuachih field site and Towers 3, 4, and 5. Received diagrams of how all the buildings communicate with each other (along with IP addresses).
- Tested dtControl with a large range of intervals and explored the code, then tried it out with Sara's board.
- Learned more about the board from Sara and even drilled some of the holes into the board (still no soldering though – too scary!).

Plans (for Week 2)

- Try to find a way to conserve the phone battery. Currently it's using up more energy than it's being charged with.
- Look into better error checking for dtCamera and dtMedia. It allows you to start the camera and video at the same time, which shouldn't be allowed.
- Try out soldering.
- Continue looking into the surroundings of the tower with Sara. We need to find out more about the sensitivity of the sensors and take into account the different climates of Taiwan.
- (Not get bitten by more mosquitoes. ☹ I have five war medals from battling mosquitoes.)

Culture



Culture



(Top) Sun Moon Lake, (Middle) View from Tower 3, (Bottom) Taipei Botanical Garden