

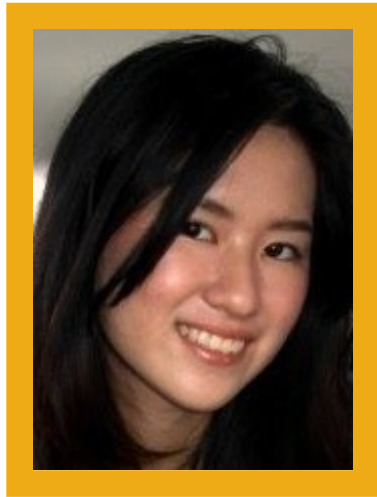


**YILING
TAY**
ytay

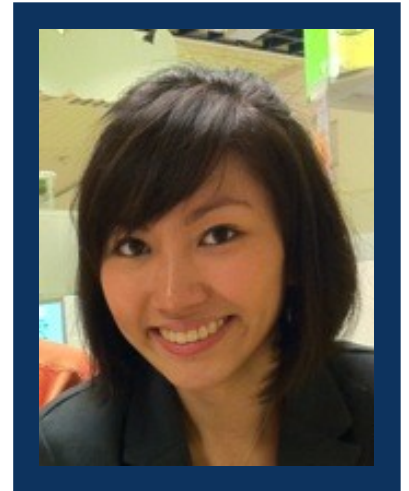


**YUMIN
WONG**
yuminw

**MIKE
RALPH**
mralph



**RYAN
CAHOON**
rcahoon



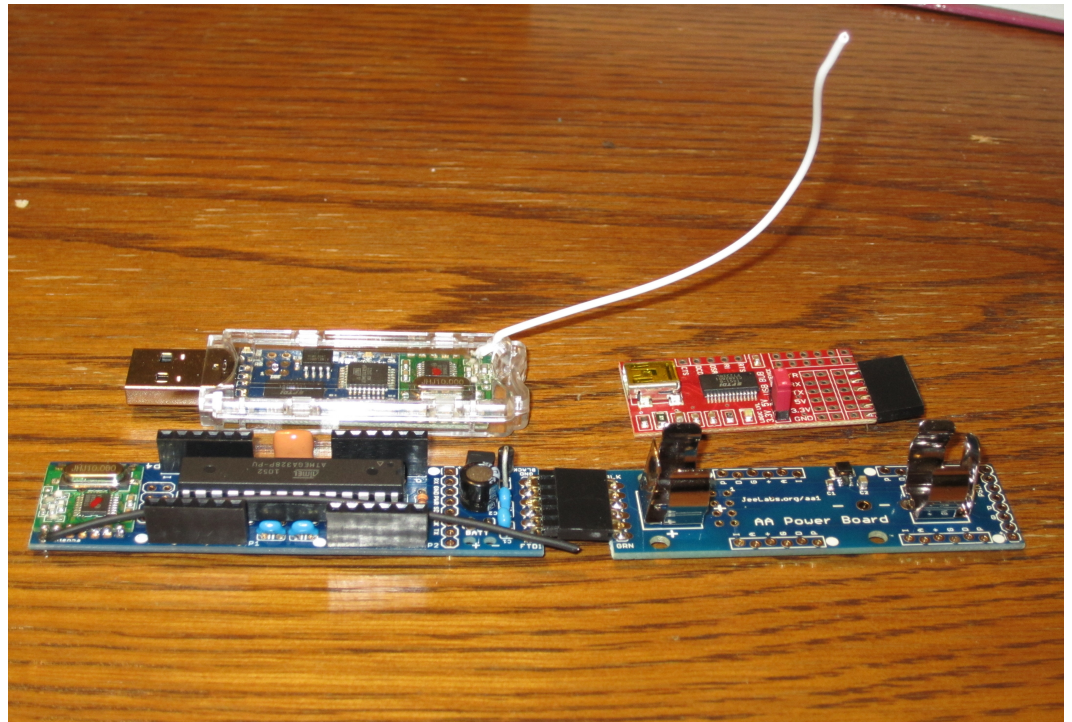
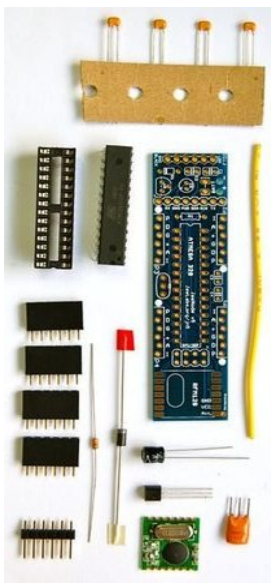
[18549] – 3D.R.AWe

Team 5

Architecture Update

Now With Remote Control!!

- ATmega328p processor and an RFM12B radio module
- Processor chip is pre-flashed with the Arduino boot loader
- Change color
- Switch between “slides”



Experimentation Plan

- ❖ Latency for phone to determine where it is
- ❖ Latency to render image (FPS)
- ❖ Latency between server sending points and phones receiving them
- ❖ Latency of server to determine XYZ coordinates
- ❖ How often server crashes
- ❖ How many points can be rendered at once
- ❖ How long phones can survive on their own
- ❖ How long can phones last without seeing tracking markers



Rachoon and I with our testing hats on

Initial Data

- ❖ Tracking phone location ~ 2.3 fps
- ❖ Graphics rendering ~ 18.4 fps
- ❖ Kinect will not be a limiting factor
- ❖ Still working on getting everything set up
- ❖ Our awesome logo:



Looking Forward . . .

- ❖ Integrating all of the system components
- ❖ Getting everything to work
- ❖ Optimizing and tuning:
 - ❖ → Granularity and frequency of data sent by server
 - ❖ → How much data phones store and how they deal with bad connection
 - ❖ → How server updates new phones (without neglecting current ones)
 - ❖ → How often server samples Kinect input/ amt of interpolation on phones

