

## **Senior Design 491 Weekly Report 9**

**Week 7 (10/26/15 – 11/1/15)**

**May1624 -- Programmable Wireless Sensor Package for CprE Education**

**Advisor/Client:** Dr. Thomas Daniels

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### **Team Members -- Roles:**

Yidong Liu – Team Leader

Xinian Bo – Team Webmaster

Niklas Jorve – Team Communication Leader

Branden Sammons – Key Concept Holder, Secretary

Jonathan Krueger – Key Concept Holder, Manager

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### **Weekly Summary:**

Dr. Daniels was able to order 2 Intel Edison devices for our group, so we spent the week testing the devices. We were able to connect to the devices over SSH and serial, and will now be able to start some preliminary development with both hardware and software. We also discussed some SOC (system-on-chip) options that could be used on our PCB design which would simplify the tasks of the PCB into manageable individual segments. We also used this week to revise our project plan to include our new requirement of using the Intel Edison instead of the Arduino Due that we originally planned on using.

### **Weekly Accomplishments:**

1. Started development with actual Intel Edison devices
2. Discovered new ideas for PCB design with “smart” chips
3. Revised project plan

### **Advisor Meeting (10/26/15):**

**Duration:** 1 Hour

**Members Attending:** Niklas Jorve, Yidong Liu, Jonathan Krueger, Branden Sammons

**Notes:** During our meeting with Dr. Daniels we spend some time troubleshooting the original Intel Edison that was not working properly. We also discussed ideas about chips that we could use to perform tasks such as Analog-to-Digital and multi-use sensors. Dr. Daniels was able to provide 2 new

Intel Edison boards to use so that we can have a hardware and software unit for each group to start development on. We discussed some initial things that we could look at and some development we might be able to start.

## **Group Meeting (10/30/15):**

**Duration:** 1 Hour

**Members Attending:** Niklas Jorve, Yidong Liu, Jonathan Krueger, Branden Sammons

**Notes:** During our group meeting we looked at the first version of our project plan and discussed how we were going to update it for the next version. We split up each section and will use the next week to revise the project plan so that during our next group meeting we can look over the changes before we submit them.

## **Plans for Next Week:**

1. Continue development work on Intel Edison
2. Look at integrating “smart” chips onto PCB design
3. Work towards creating a first draft prototype PCB design
4. Complete second version of the project plan
5. Meet with 492 group

## **Individual Contributions:**

Niklas Jorve	Attended meetings, worked on weekly report, worked on project plan
Yidong Liu	attended meetings, project plan, play with edison board
Branden Sammons	Attended meetings, and test developed with edison.
Jonathan Krueger	Attended meeting, planned meetings, fixed broken Edison, worked on setting up Edisons, test developed edison.
Xinian Bo	Attend meeting, looked at pcb design

**Project Contributions:**

Member	Project Time this week (hours)	Total Project Time (hours)
Niklas Jorve	3	25
Yidong Liu	5	23
Branden Sammons	4	25
Jonathan Krueger	6	31
Xinian Bo	3	16