

*Group number: May 1715*

*Project title: Internet of Machines*

*Client &/Advisor: Vermeer, Keith Bryant and / Dr. Sang Kim*

*Team Members/Role: Dean VanEvery/Team Leader, Cody Lample/Key  
Concept Holder, James A Kluesner, Matthew Gustin/Webmaster, Sam  
Ellis/Communications Leader, Kojo Otchere-Badu*

o **Weekly Summary**

Finalized times for individual portions of the project to be complete (node, gateway, and database portions) so that they may be integrated once everyone returns from spring break. Moved development on gateway and node portions to use an actual arduino module to transmit and do pre and post processing on the original raspberry pi modules.

o **Past week accomplishments**

- Matt Gustin – Write system update route
- Dean VanEvery - troubleshot problems with the hardware, found out we needed to use arduino instead of given shield.
- Sam Ellis – Researched methods of getting data from gateway pi to database
- Kojo Otchere-Badu – (w/ Cody) Worked on a method to maintain sample rate even if machine is turned off intermittently.
- Cody Lample - (w/ Kojo) Worked on a method to maintain sample rate even if machine is turned off intermittently.
- James Kluesner – Worked on Python scripts to get data in and out of ArduinoIDE

o **Pending issues**

Technical difficulties with piping data from the arduino to the raspberry pi, but preferable to using the converter shields.

o **Individual contributions**

| <b><u>NAME</u></b> | <b><u>Individual Contributions</u></b>                                     | <b><u>Hours this week</u></b> | <b><u>HOURS cumulative</u></b> |
|--------------------|--|-------------------------------|--------------------------------|
| Cody Lample        | Determine packet format & write function to format data into packet        | 2                             | 16                             |
| Dean VanEvery      | troubleshoot problems with the hardware                                    | 2                             | 11                             |
| James Kluesner     | Python Scripts   | 3                             | 15                             |
| Matt Gustin        | Write system update route  | 2                             | 22                             |
| Sam Ellis          | Researched methods of pushing data to mongodb with python via http request | 1                             | 16                             |
| Kojo Otchere-Badu  | Maintaining sample rate  | 2                             | 17                             |

o **Plan for coming week**

Use spring break as an opportunity to get rested and do some more research on porting our raspberry pi tools to the arduino converter module.