

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**

Returned from spring break, reviewed what needed to be done in the remainder of the month. Met with completed individual parts to do preliminary integration. Used this to evaluate & document future work outside of expected tasks.

o **Past week accomplishments**

- Matt Gustin – Write gateway update route
- Dean VanEvery – researched ways to pipe data onto and off of Arduino IDE for use in the rPi.
- Sam Ellis – Created skeleton script to push data from gateway to database in required format.
- Kojo Otchere-Badu – (w/ Cody) Determined packet format and wrote C function to save transmission packet as a text file
- Cody Lample - (w/ Kojo) Determined packet format and wrote C function to save transmission packet as a text file.
- James Kluesner – Continued work on python scripts

o **Pending issues**

We found that it was very difficult to use (software) tools that we expected to be able to use with the raspberry pi with the arduino. We would recommend in the future to avoid using such hardware in a production format and instead implement a unix-based system to allow a wider variety of software to be available to expand the design upon rather than solely the arduino IDE.

o **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Cody Lample	Clean up C code	2	18
Dean VanEvery	Research uploading and off loading data from Arduino	2	13
James Kluesner	Python Scripts	3	18
Matt Gustin	Write gateway update route	2	24
Sam Ellis	Created script for gateway to push to server	3	19
Kojo Otchere-Badu	Forming packet	2	19

o **Plan for coming week**

Work to overcome outlined difficulties and integrate the individual portions of the project. Meet with advisor to express these concerns and work to minimize the sensor data packetization.