EE 491 WEEKLY REPORT 6 *Date: 10/18/16-10/24/16*

Group number: May 1715

Project title: Internet of Machines

Client &/Advisor: Vermeer, Keith Bryant / 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, Yulin Song, Kojo Otchere-Badu

- **Weekly Summary**

  This week our team focused work on better understanding LoRa and LPWAN as an Internet of Things technology and its application therein. We discussed this with both our adviser and our sponsor to get a better understanding of its strengths and weaknesses, and to gauge if it would be a good choice to meet the needs of those we would be delivering to.

- **Past week accomplishments**
  - Matt Gustin – Research sending data from Raspberry Pi to web server, Research LoRa (Libelium)
  - Dean VanEvery –
  - Sam Ellis – Researched LoRa and other LPWAN technologies and their support in Raspberry Pi and other microcontroller hardware.
  - Kojo Otchere-Badu – Researched LoRa and its benefits.
  - Cody Lample - Researched Database and front end solutions
  - James Kluesner – Met with faculty advisor, researched LoRA
  - Yulin Song –

- **Pending issues**

  The only current issue is the amount of time needed to complete sufficient research regarding LPWAN hardware options; a platform that no one in the project team has worked with before. As such, this will be a big portion of our work for the remainder of the semester.

- **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Cody Lample	Research specific hardware for sensors and transmission	2	14
Dean VanEvery			13
James Kluesner	Met with faculty advisor, researched LoRA	2	16
Matt Gustin	Research PHP and python examples for sending data from Raspberry Pi to webserver	5	13
Sam Ellis	Researched LoRa-supporting hardware applicable for the Raspberry Pi platform	3	16
Yulin Song			10
Kojo Otchere-Badu	LoRa research	2	15

- **Plan for coming week**

  Begin creating a definite list of parts to order with a deadline of December 2nd.

  Do more research regarding sensor hardware available on the Raspberry Pi platform and what statistics we wish to provide as a common baseline.