

Report Date: 10/21/2022

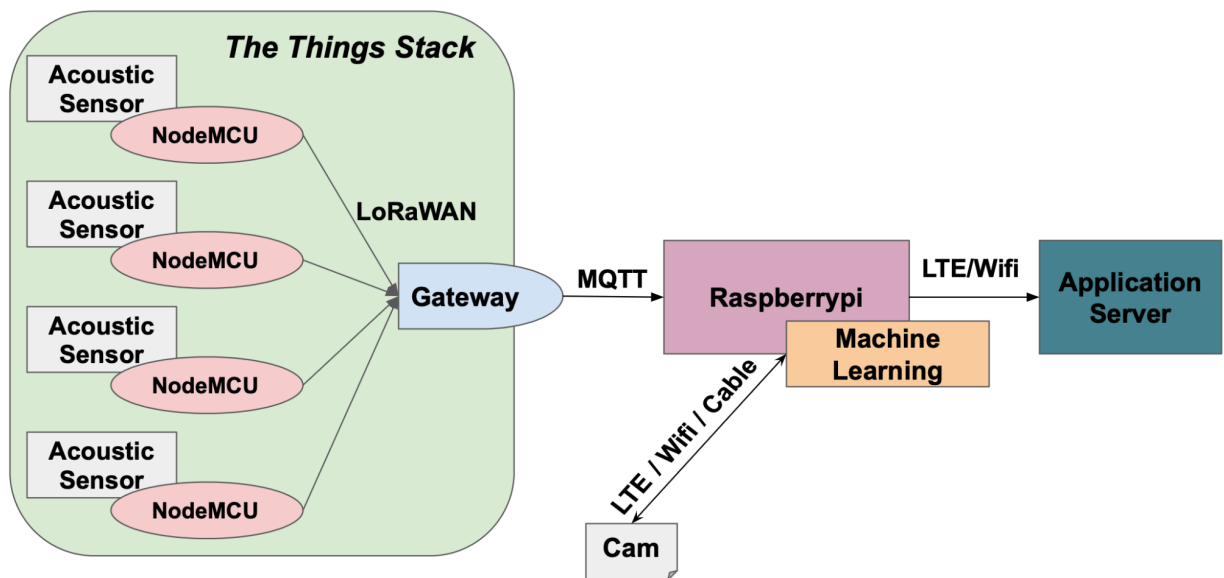
To: ematson@purdue.edu, ahsmith@purdue.edu, lee3450@purdue.edu

From: Team Coyote(Sensors & Network)

- Hyemin Lim (freemini2@cau.ac.kr)
- Nayoun Kim (202010766@live.wsu.ac.kr)
- Jaehui Boo (32192075@dankook.ac.kr)
- Hyeongjun Kim (aa980305@cu.ac.kr)

Summary

This week, the team prepared for the midterm presentation and midterm paper submission. Purdue students gave us some feedback on both of them, and Yaquin had a meeting on presentation too. The architecture was changed again, including the network and application server platform. Study about LoRaWAN packets and its format was done, however still couldn't figure out how to reduce latency in sending data packets.



What Coyote Team completed this week:

- Put in the sensor data in the array and sending to the gateway
- Wrote Mid PR script and made Powerpoint
- Edited our paper
- Studied the format of sending data
- Set the new project architecture
- Completed the test of sending data to the gateway and calculating the estimated time.

Things to do by next week

- Optimize the latency of sending data packets to the server
- Work on localization algorithm
- Collect the data and make it into one array

Problems or challenges:

- Find a way to reduce latency when sending data from three sensors
- How to compress the sensor data

References

[1] Saranga-K-Mahanta-google. "Audio Feature Extraction" Devopedia. May, 23, 2021. [Online]. Available: <https://devopedia.org/audio-feature-extraction#Singh-2019>

[2] Ben Noble, Jonathan Sanders, Jeremy Hopfinger. "Acoustic Triangulation Device" Oct, 18, 2022 [Online]. Available: <https://www.ece.ucf.edu/seniordesign/fa2009sp2010/g13/files/ATD%20NewUpdate.pdf>