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Summary
- We studied the book named "Machine learning that you study alone"[1] chapter 1, 2, 4 in the morning.
- We met Purdue student Griffin, and we planned our working time and we explained our project.
- We found and studied audio classification references.
- Bokyung and Heesun gave the presentation to their teammates.
- We met Mia, and read Mia's paper[2] and we made an appointment.

What Coyote2 completed this week:
- We studied the book named "Machine learning that you study alone"[1] chapter 1, 2, 4 every morning. Chapter 1 is about "What is machine learning?" and chapter 2 is about data set and chapter 4 is about "logistic regression and stochastic gradient descent method".
- We had a meeting with Team Coyote-1.
- We received Mia's paper[2] and discussed it with Tony.
- We Studied the paper. Search for papers based on Keywords in Mia's paper[2] (audio classification[3][4] / feature extraction[5] / spectrogram features[6]). And Heesun Jung, Bokyung Kwon presented each paper review[3][5] .
- We met Griffin Pegg who is a Purdue student, and assigned tasks to read Mia's paper[2] .

Things to do by next week
- Yejin Lee, Youngbin Kim and Jihyeon Park should present and review the paper[4][6][7] that is related to our project.
- We have a meeting on Tuesday with Mia and Team Coyote-1.
- We need to keep studying a Machine Learning book called "Machine learning that you study alone"[1] until Chapter 6.
- We should meet Griffin on Monday, Wednesday and Thursday. And Griffin should present Mia's paper[2] on Monday.
- We should find our dataset of coyotes howling.
- We will prepare our presentation of Mia's paper[2].

Problems or challenges:
- We need to challenge ourselves by studying a new field which is acoustic classification.
- It was a challenge to apply the topic that Professor Tony suggested to our team's field. We decided to cooperate with the other team (Networking & IoT)
- We had to find lots of references that are related to our project.

References

[1] Hyesun P. "Machine learning that you study alone," in *Hanbit Media*, 5th ed., South Korea, 2022, pp. 26-213.

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[6] Muda, Lindasalwa, Mumtaj Begam, and Irraivan Elamvazuthi. "Voice recognition algorithms using mel frequency cepstral coefficient (MFCC) and dynamic time warping (DTW) techniques." arXiv preprint arXiv:1003.4083 (2010).

[7] Vera-Diaz, Juan Manuel, Daniel Pizarro, and Javier Macias-Guarasa. "Towards end-to-end acoustic localization using deep learning: From audio signals to source position coordinates." Sensors 18.10 (2018): 3418.