Report Date: 10/14/2022

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

From: TOP GUN

- Heejun Park (parkie0517@gmail.com)
- Taeyun Kim (wwexodbs@naver.com)
- Hanbi Kim (hanbikim20@g.cbnu.ac.kr)
- Seokhyeon Heo (gj4535@gmail.com)
- Jeongho Ha (hjh4212@naver.com)

Summary

Team TOP GUN had a lot of discussions about the upcoming mid-paper, and the mid-presentation. Jeongho and Heejun will take charge of the mid PR. Seokhyeon Taeyun and Hanbi wil take charge of QnA. The introduction part and the material and method part of the mid-paper were completed. Moreover, the machine learning team is trying to implement a new model, and the deep learning team has succeeded in implementing the first model.

What TOP GUN completed this week:

- Hanbi kim and Taeyun kim read and summarized six papers that are related to this project.
- Reviewed Minji's feedback on Abstract
- TOP GUN decided who will take charge of the Mid PR (Heejun Park, Jeongho Ha) and who will take charge of the QnA (Seokhyeon Heo, Taeyun kim, Hanbi kim).
- Instruction Team (Hanbi kim, Taeyun kim, Seokhyeon Heo) finished writing Introduction.
- Jeongho and Heejun wrote Materials and method.
- Jeongho and Heejun started making a ppt for the mid presentation.
- Deep learning team implemented the model and got 35% accuracy.
- Machine learning team also started to make classification models.

Things to do by next week

- Complete the mid-paper draft.
- Make Github organization.
- Make PPT slides for mid-presentation.
- Machine learning team will complete making the classification models.
- Deep learning team will tune the model, and implement another model.

Problems or challenges:

- Deep learning is having trouble preprocessing the data
- It was difficult writing the introduction part of the paper since everyone in Team Top Gun were not familiar with the format of the paper.
- Had difficulty choosing English words.
- Writing a script for the Midterm presentation.

References

CHU-HUI Lee, and Jhih-Chen Jhou. (2021). **A Non-Invasive Method to Classify the Sweetness Levels of Apples.** Presented at 2021 5th International Conference on Artificial Intelligence and Virtual Reality(AIVR), Kumamoto, Japan. ****

https://dl.acm.org/doi/pdf/10.1145/3480433.3480453

Seonjong Kim. (2022). **Analysis of Apple Colors and Sugar Contents Using Linear Regression.** presented at The Journal of the Convergence on Culture Technology. Dept. of Applied IT Eng., Pusan National Univ., Korea.

https://koreascience.kr/article/JAKO202208148789847.pdf

Siti Khairunniza Bejo, and Syahidah Kamaruddin. (2014.) **Determination of Chokanan mango sweetness (Mangifera indica) using non-destructive image processing technique.** presented at the Australian Journal of Crop Science 8(4):475-480.

https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1063.434&rep=rep1&type=pdf