Dec. 2nd week $(5 \sim 9)$

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From: TOP GUN

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Summary

This week, Team Top Gun divided up the roles for the presentation, and completed to make the presentation slides and script. In addition, a new model was implemented according to a new apple dataset. Team Topgun is in the process writing the final paper.

What TOP GUN completed this week:

- Divided each member's roles for the presentation.
- Heejun preprocessed on the data range and wrote conclusion.
- Jeongho extracted machine learning characteristic values and made a machine learning model.
- Machine Learning team (Taeyun, Hanbi, Jeongho) attempted to improve performance by tuning the model.
- PPT team (Seokhyeon, Hanbi, Taeyun) made a presentation slides and wrote the script.
- Seokhyeon made the Deep Learning model and conducted the experiments while changing the dataset.
- Seokhyeon preprocessed the data for Deep Learning.
- Hanbi wrote an application partial paper for the methodology.
- Hanbi modified the GitHub Ridmi file.

Things to do by next week

- Prepare for the presentation.
- Complete the Deep Learning and Machine Learning models.
- Make machine learning and deep learning ensemble models.
- Finish writing the thesis and get revisions.

Problems or challenges:

• The accuracy does not come out high.

• Deep learning experiments took too much time.

References

U.S. Department of Agriculture. World Production, Markets, and Trade Report (2022, Jun, 14), *Fresh Apples, Grapes, and Pears: World Markets and Trade*. [Online]. Available: https://apps.fas.usda.gov/psdonline/circulars/fruit.pdf

Schwallier. P, "Checking apple maturity: What to look for," Michigan State Univ. Extension, Aug. 28, 2012. Accessed: Oct. 6, 2022. [Online]. Available: https://www.canr.msu.edu/news/checking_apple_maturity_what_to_look_for