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 is in the process to increase the accuracy of the model and is in the process of developing a new model. In addition, team Top Gun decided to focus on coding and continued to develop our research for a while, since the mid presentation is over.

What TOP GUN completed this week:

- Created a collaborative environment with GitHub
- Worked on extracting various meaningful features used in machine learning and deep learning.
- The machine learning team made the classification model.
- The Deep learning team implemented the Deep Learning TabNet model and got 60 percent performance accuracy.
- The deep learning team learned the model by changing the Augmentation technique on the EfficientNetB0, B1 base.
- With the application of ReduceLRonPlateau, the Lering Rate Scheduler was changed to the Ramp Up and Step Decay method, initially increasing from 1e-5 to 2 Ramp Up steps and increasing it to 1e-4.
- Found out that the learning rate was reduced every two times to learn the model, by using the Step Decay method. The accuracy was 56%.
- Machine learning team is developing a new model using linear regression.
- Hanbi Kim is developing an image regression model. A preprocessing process was performed for the image regression model.
- Jeff is implementing the Tabnet model with Heejun.
- Kyung is looking for better features for prediction

Things to do by next week

- Perform data preprocessing so that the Lab format can be used with RGB.
- The machine learning team will do hyperparameter tuning.
- The deep learning team will create a regression model.

Problems or challenges:

- Hard trouble when building an EPD V2-XL model.
- Faced a problem when applying Lab color space to the machine-learning model.
- It was hard to get a high-accuracy in the machine-learning model.

References

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