

# ENEL645 - Winter 2022

## Final Project - Team Effort

Brandon Quan, Gregory Slowski, Michael Kissinger, Meet Pandya, Zachary Frena

April 4, 2022

# 1 Team Members Contribution

Brandon worked on the training, validation, and testing of the Inception V3 models used in this project, leveraging the servers available through the TALC cluster at the University of Calgary. On the report, he contributed to the Method & Approach, and Results sections for the Inception V3 models in addition to his contributions to other sections, such as Introduction, Related Works, Discussion, and Conclusion.

Zach's contribution to this project involved all model training, validating, and testing surrounding the VGG16 model. For the model training process, he utilized the computation resources provided by the University of Calgary's TALC cluster. In addition to going through the model training and testing process, he also contributed to the report in the VGG16 approach section as well as the results section regarding the VGG16 model. Zach also provided detailed insight for both the Discussion and Conclusion sections, both related to the VGG16 model as well as an overall commentary on the classification of garbage classification.

Greg worked on researching, training, validation, and testing of the ResNet50 model for this project. Training and validation was completed using the UCalgary Talc cluster, while testing / evaluation was run locally. For the report he contributed to part of the abstract, the ResNet50 modeling approach and results, as well as added to code approach for the information pertaining to labelling distributions. Additionally he created the visualizations notebook to add in visualizations for those noted labelling distributions. Greg also did additional research into the details of dropout and fine tuning.

Michael completed the training, validation, and testing of the EfficientNetB0 models used in this project. This training was all done by submitting the files to the the University of Calgary's TALC cluster. For the report, he fully completed the method and approach, and results sections for the EfficientNetB0 models, including the discussion of this models background, significance, and the results of applying this model to the dataset. Lastly, he also contributed to other sections of the report, such as, the discussion and conclusion sections, as well as overall report editing and formatting.

Meet worked on training, validating and testing the DenseNet121 model for this project. The University of Calgary's TALC cluster was leveraged in order to train the dataset. For the report, he worked on training his model using and talk about the results he came across along with some useful accuracy and loss plots. In the report, he wrote the abstract and figured out the syntax for references in Latex. And, finally he also contributed to the overall report editing, formatting and ensuring there are not any grammatical mistakes.

# 2 Team Member Effort Score

Table 1: Team Effort

Team Member	Effort Score
Zachary Frena	3
Michael Kissinger	3
Meet Pandya	3
Brandon Quan	3
Gregory Slowski	3