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**Course:** CIS 378

**Instructor:** Dr. Denton Bobeldyk

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**CIS 378 Final Project**

**Training:**

We trained using Kaggle's free GPU: <https://www.kaggle.com/code/leohooo/cis378-project>

**Dataset:**

We used the Kaggle Plant Village dataset

<https://www.kaggle.com/datasets/abdallahalidev/plantvillage-dataset/code> using only 12000 samples from 54000 images from the color folder.

**Result:**

A screenshot of a computer

AI-generated content may be incorrect.

**File Description:**

* **cis-378.ipynb:** Contains the full training and inference setup to run on Kaggle.
* **data\_preprocessing.py:** Prepares data by converting images into the input format required by the models.
* **distiller\_train.py:** Trains the student model using a custom loss function.
* **base\_train.py:** Trains the baseline model for performance comparison.
* **train\_teacher.py:** Trains the teacher model.
* **inference.ipynb:** Visualizes the model outputs.
* **main.py:** Runs the training scripts from the other modules.