5 - Fine-tuning and Using a Small Custom Model

Scenario

1. start with a previously trained model: *see how it goes*
2. manually correct some of the automatic transcriptions
3. **fine-tune model with corrected data**
4. use in production

Things We Need

- path to reformatted training data
- path to original ATR model

Modifying htr-train-pipeline.sh

```
USEBASEMODEL=1
HTRBASEMODEL=PATH_TO_HTR_BASE_MODEL
```

Modifying htr-train-pipeline.sh

```
listdir=PATH_TO_LISTDIR
```

Modifying htr-train-pipeline.sh

```
epochs=1
```

Modifying htr-train-pipeline.sh

```
batch_size=40
model_name=myfirstmodel
learning_rate=0.0003
```

Modifying htr-train-pipeline.sh

```
outputdir=$tmpdir/output
```

Running htr-train-pipeline.sh

```
./htr-train-pipeline.sh
```

Using the Newly Trained Model

Scenario

1. start with a previously trained model: *see how it goes*
2. manually correct some of the automatic transcriptions
3. fine-tune model with corrected data
4. **use in production**

Modifying inference-pipeline.sh

```
HTRLOGHIMODEL=INSERT_FULL_PATH_TO_LOGHI_HTR_MODEL_HERE
```

Running inference-pipeline.sh

```
./inference-pipeline.sh PATH_TO_IMAGES
```

Inspecting the Results

We have covered how to:

- use an already trained model
- create training data from annotated images
- fine-tuning an existing model
- use the fine-tuned model