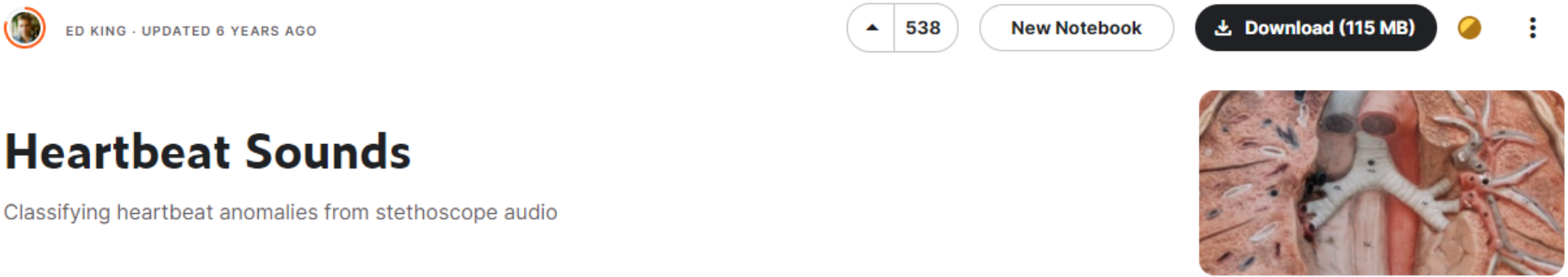
Audio Classification Exercise

Audio Classification

Dataset

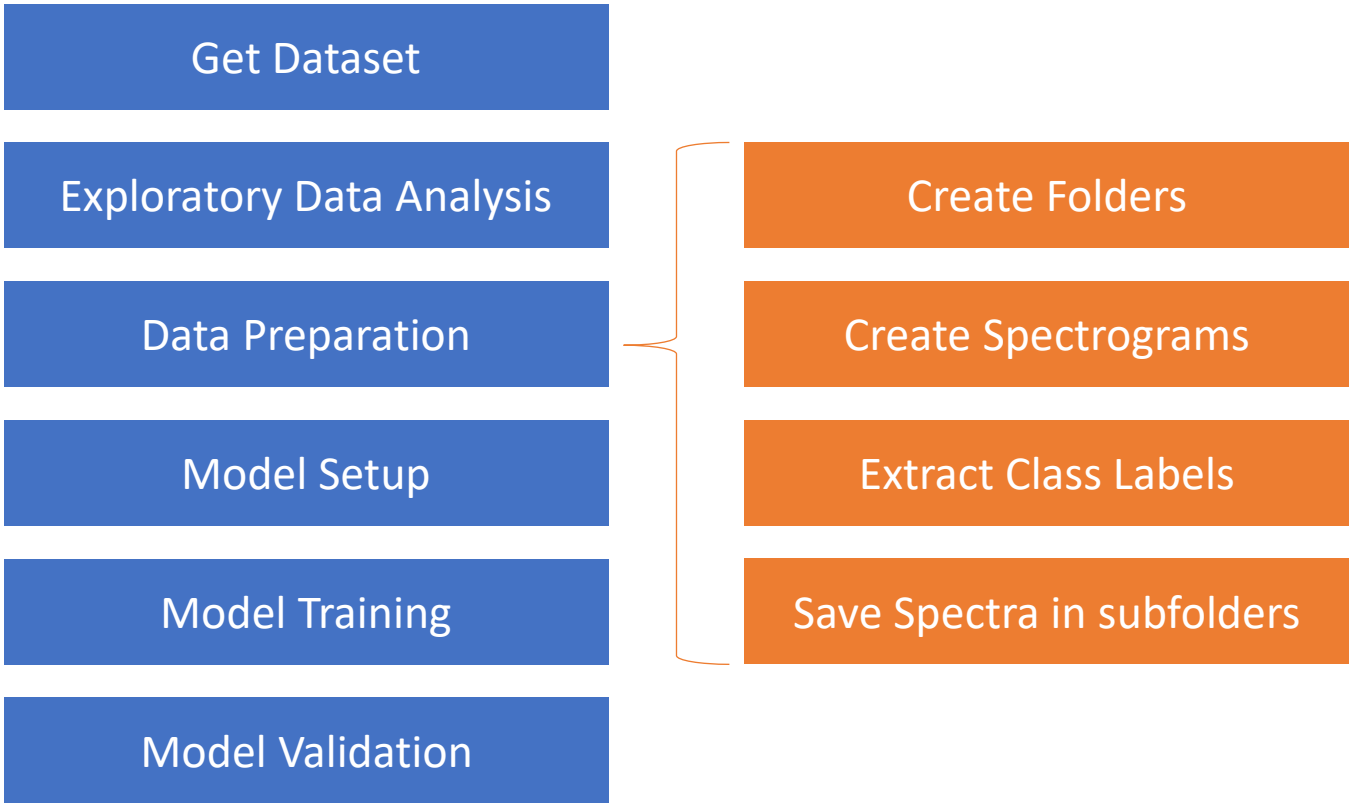
- Kaggle dataset: **Heartbeat Sounds**
- perform beat classification into classes:
  - Artifact
  - Normal
  - Extra Heart Sound
  - Murmur
- 176 WAV recordings available



Source: https://www.kaggle.com/datasets/kinguistics/heartbeat-sounds

Audio Classification

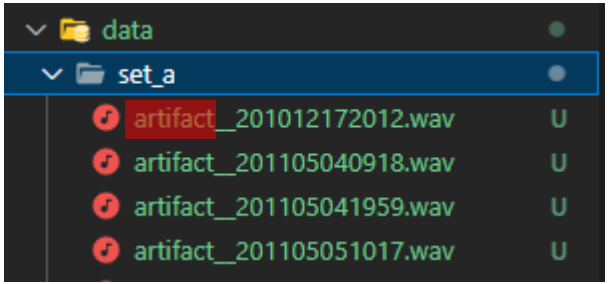
Procedure

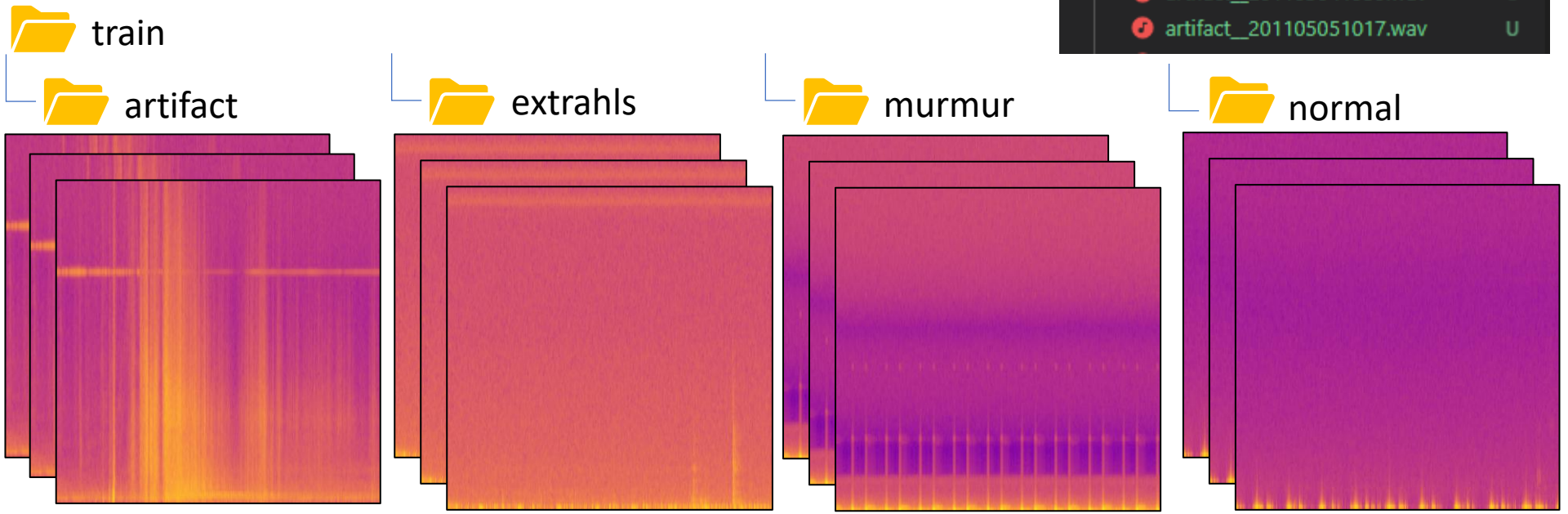


Audio Classification

Data Preparation

- will only work with set_a folder data
- extract class type from filename
- convert WAV file to spectrum image

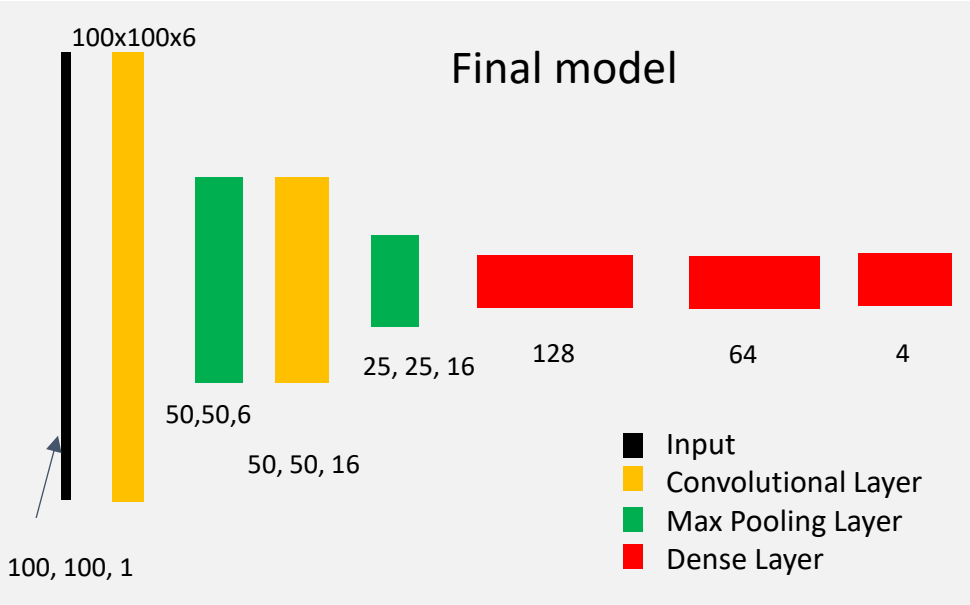


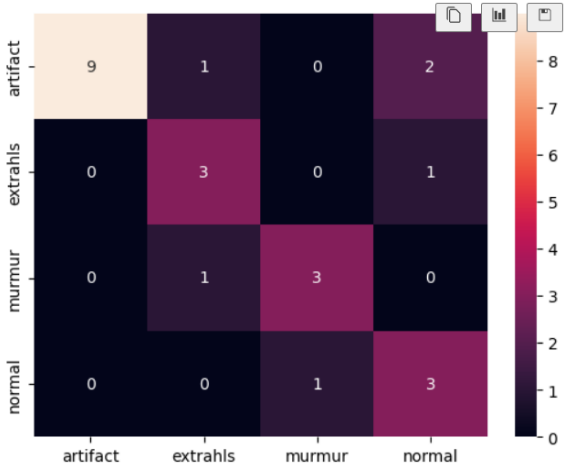


Audio Classification

Modeling

Convolutional Neural Network





Test Confusion Matrix

Accuracy: 75%

Baseline Classifier: 50%