# SoundMap:

## A visualization tool for large sound file datasets

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CPSC 547 Project Pitch
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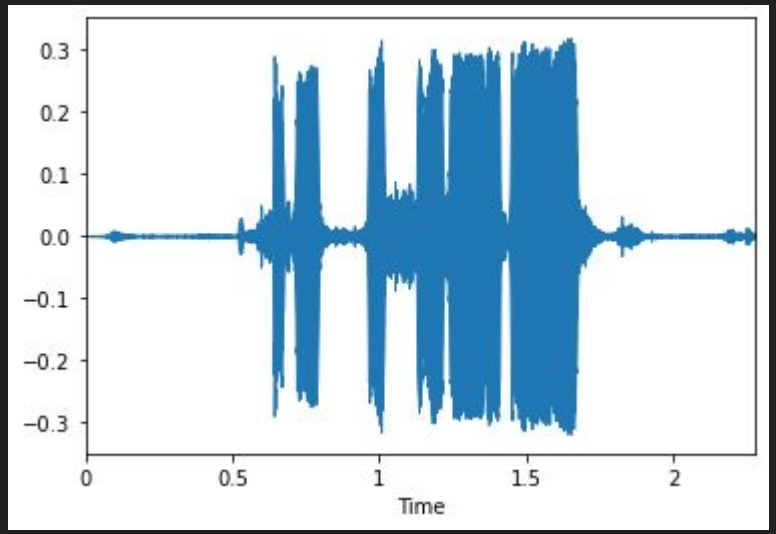
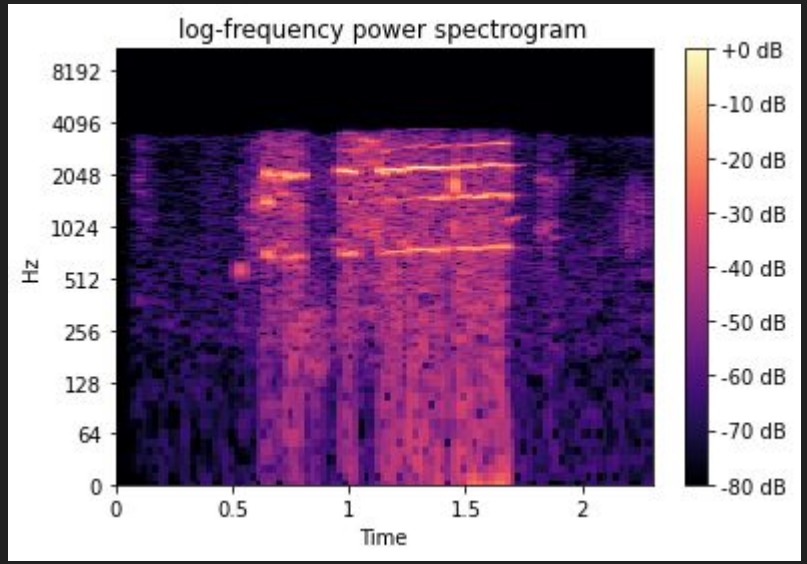
# Motivation

- Visualizing one sound file is easy




Waveforms




Spectrograms

# Motivation

- Visualizing hundreds of sound files is hard
  - Extract and compare features
  - Generate new similarity relationships
  - Different views for levels of detail

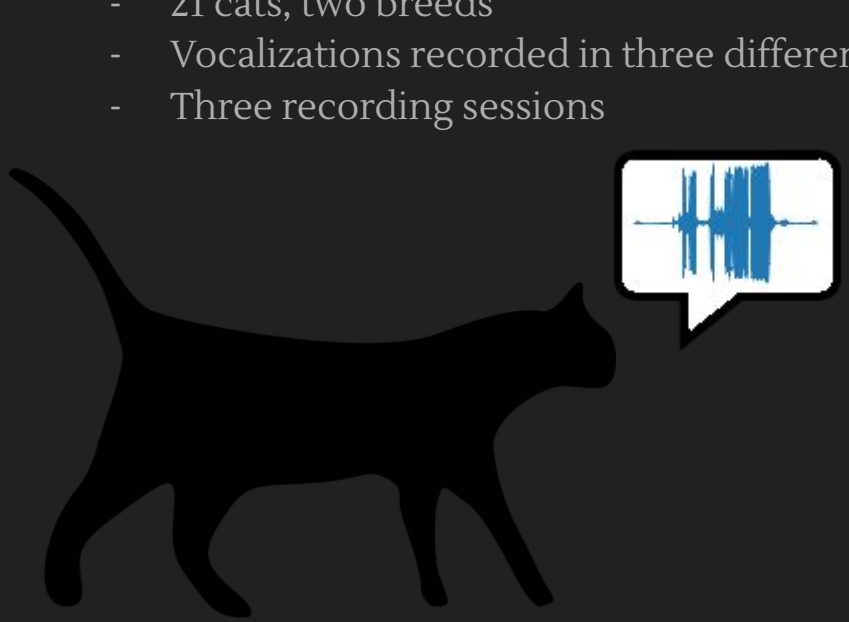
- We also might want to visualize external information
  - Music genres
  - Soundscape elements
  - Recording devices

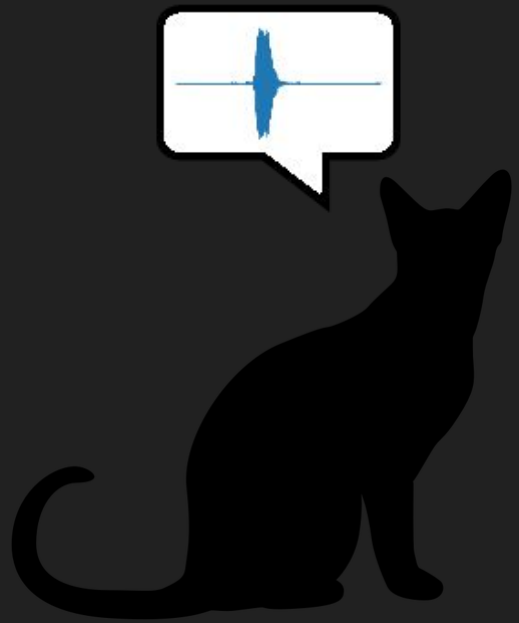
# Proposed Solution

- Create a vis tool to help users evaluate similarities and differences among a large number of sound files
  - Scalable
  - Accessible for novice users
  - Display relevant sound features (e.g., frequency, chronemics)
  - Display relevant external features (e.g., music genre)
  - Interactions to switch between views with different levels of detail

# Dataset

- CatMeows: A Publicly Available Dataset of Cat Vocalizations
  - 440 sound files
  - 21 cats, two breeds
  - Vocalizations recorded in three different scenarios
  - Three recording sessions





# Looking for Teammates!

- Send me an email: reid42@cs.ubc.ca, or respond on Piazza if you're interested in this project!