Snap Point

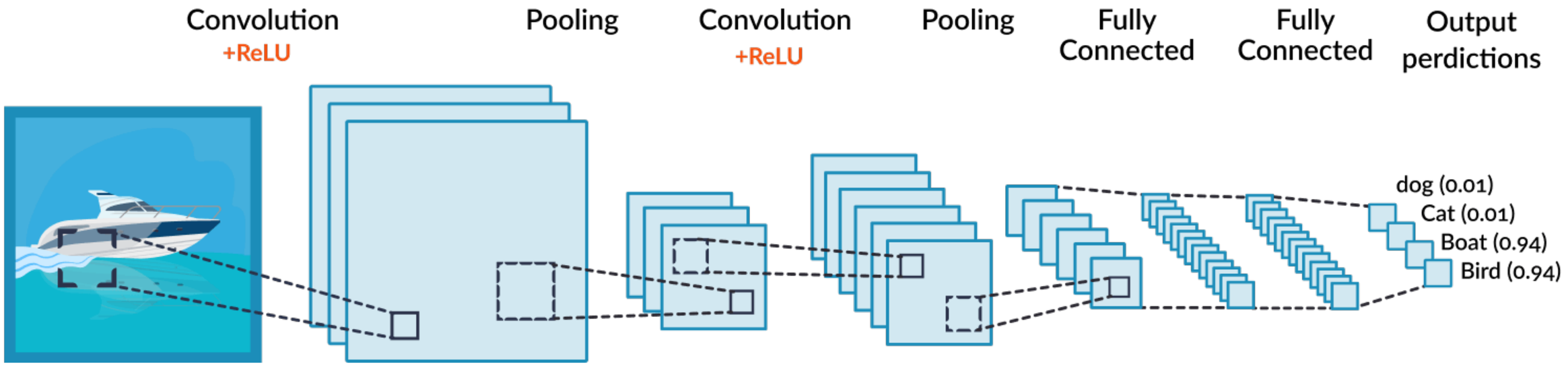
TEAM JitterBug

18기 오중균

18기 김창영

```
model = tf.keras.models.Sequential()
model.add(Conv2D(32, kernel_size, padding='same', input_shape=(18,128,1)))
model.add(Activation('relu'))
model.add(MaxPooling2D(pool_size=pool_size))
model.add(Dropout(0.5))

model.add(Conv2D(64, kernel_size, padding='same'))
model.add(Activation('relu'))
model.add(MaxPooling2D(pool_size=pool_size))
model.add(Dropout(0.5))

model.add(Conv2D(128, kernel_size, padding='same'))
model.add(Activation('relu'))
model.add(MaxPooling2D(pool_size=pool_size))
model.add(Dropout(0.5))

model.add(Flatten())
model.add(Dense(600))
model.add(Activation('relu'))
model.add(Dropout(0.5))
model.add(Dense(10))
model.add(Activation('softmax'))

model.compile (optimizer= 'adam', loss='categorical_crossentropy', metrics = ['accuracy'])
```

CNN


Convolution
+ReLU
Pooling
Convolution
+ReLU
Pooling
Fully Connected
Fully Connected
Output perdictions
dog (0.01)
Cat (0.01)
Boat (0.94)
Bird (0.94)

ver_1.0.h5

0 = noise
1 = snap & clap

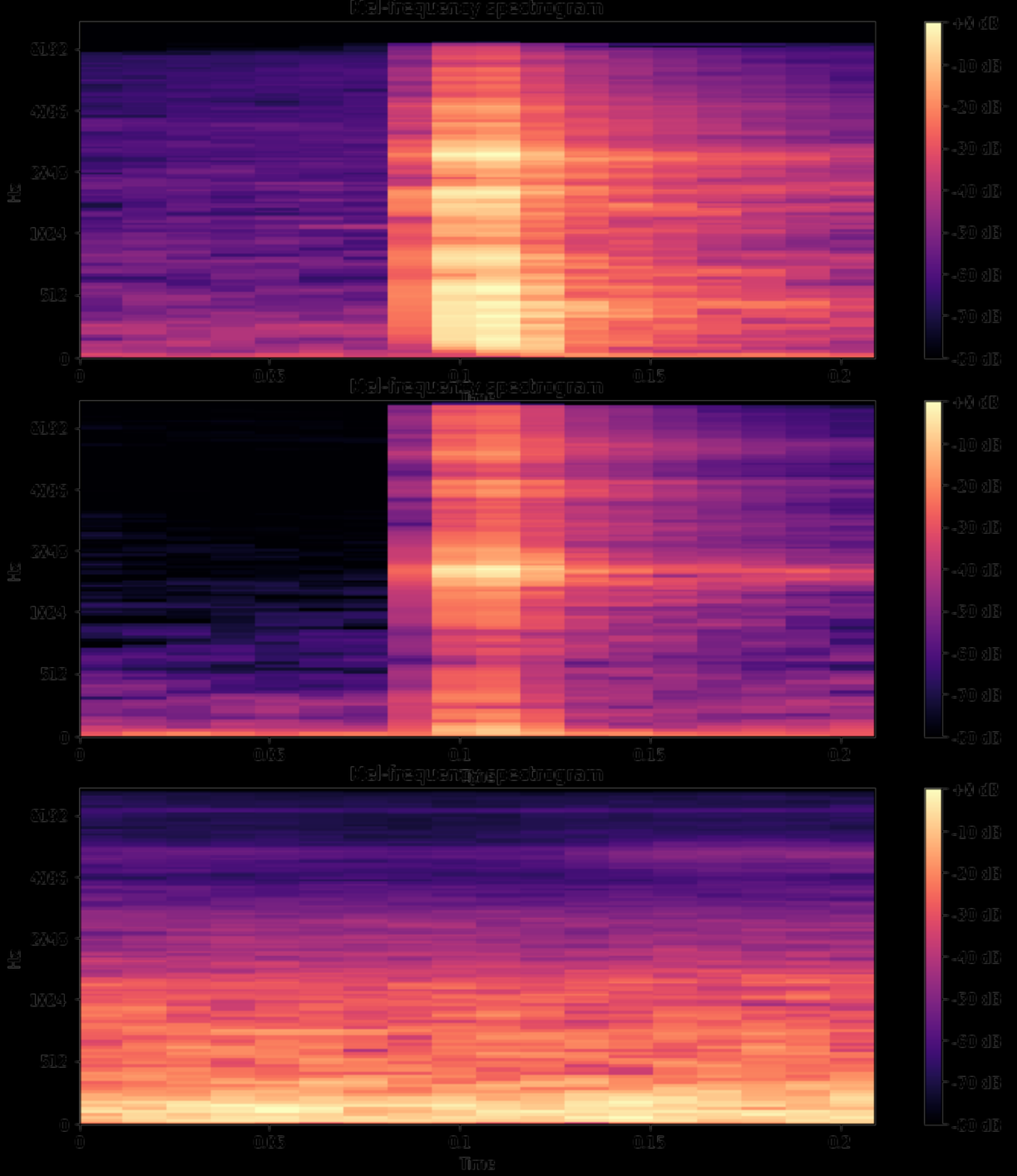
ver_1.1.h5

0 = noise
1 = snap
2 = clap

clap

snap

noise




근데 어떻게 컨트롤하지?

PyAutoGUI

Python Module for
Programmatically Controlling
the Mouse and Keyboard

```
pyautogui.press('space')

pyautogui.keyDown('shift')
pyautogui.press('n')
pyautogui.keyUp('shift')
```

```
def test(sample):
    data = standardized_mfcc(sample)
    predictions = loaded_model.predict(~~~~~~~)
    if numpy.argmax(predictions) == 1:
        # PowerPoint, KeyNote : Next Slide
        # YouTube, Netflix, Music : Toggle Play / Pause
        pyautogui.press('space')

        # # YouTube : Next Video
        # pyautogui.keyDown('shift')
        # pyautogui.press('n')
        # pyautogui.keyUp('shift')
        print("Snap")
        time.sleep(0.1)
```



Demo

Q&A