

Deep Neural Networks for Automated Detection of Marine Mammal Species

Tara Boroushaki

Ocean IoT class presentation

Why do we need to detect marine mammal species?

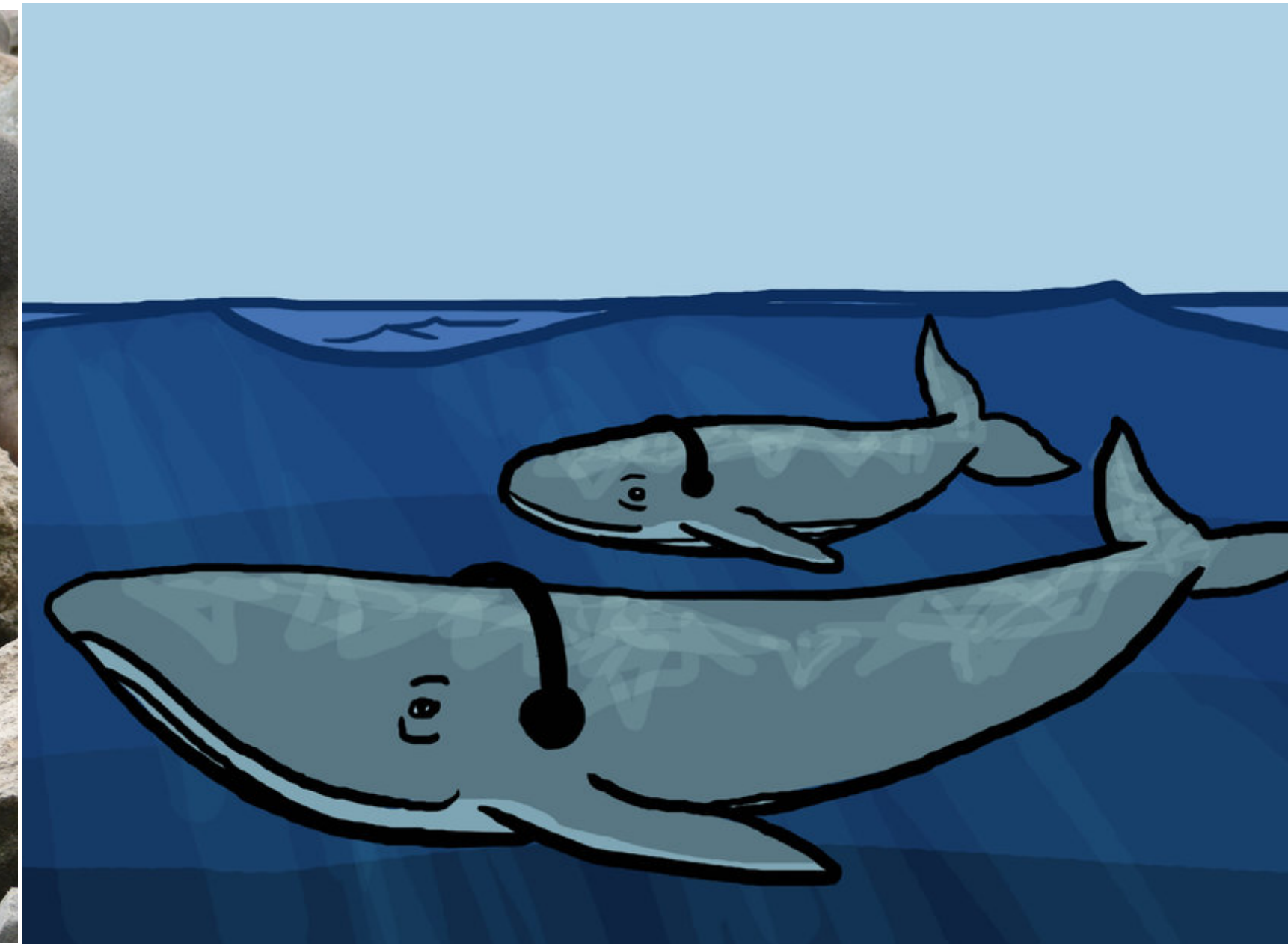
Helps us to manage human activities to preserve habitat quality



Collision with ships

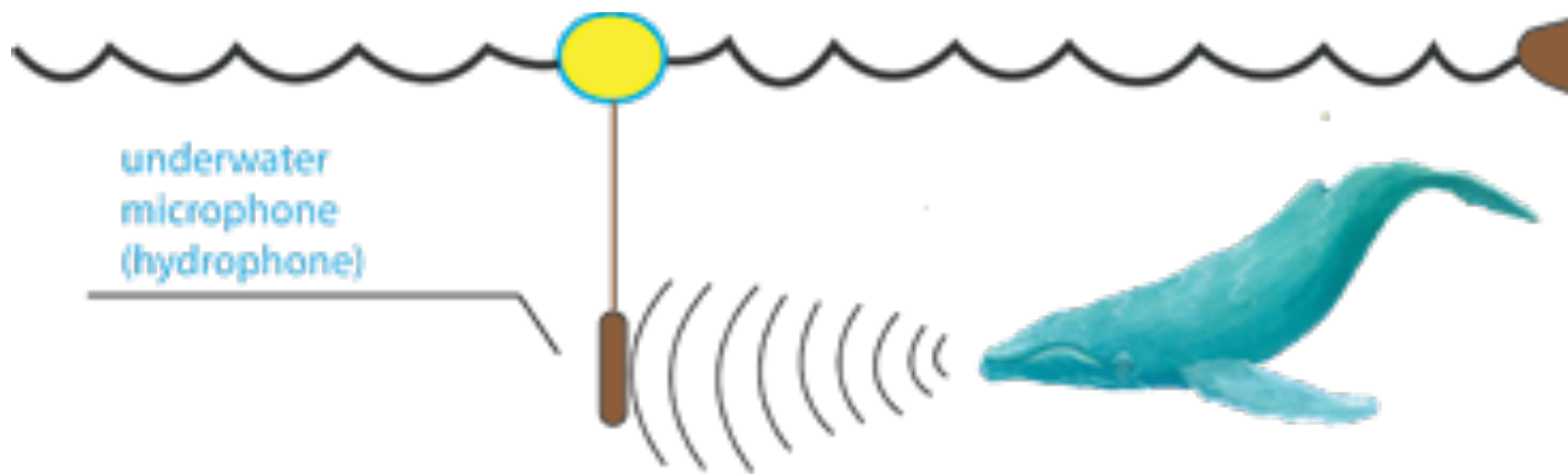


Entanglement in fishing gears

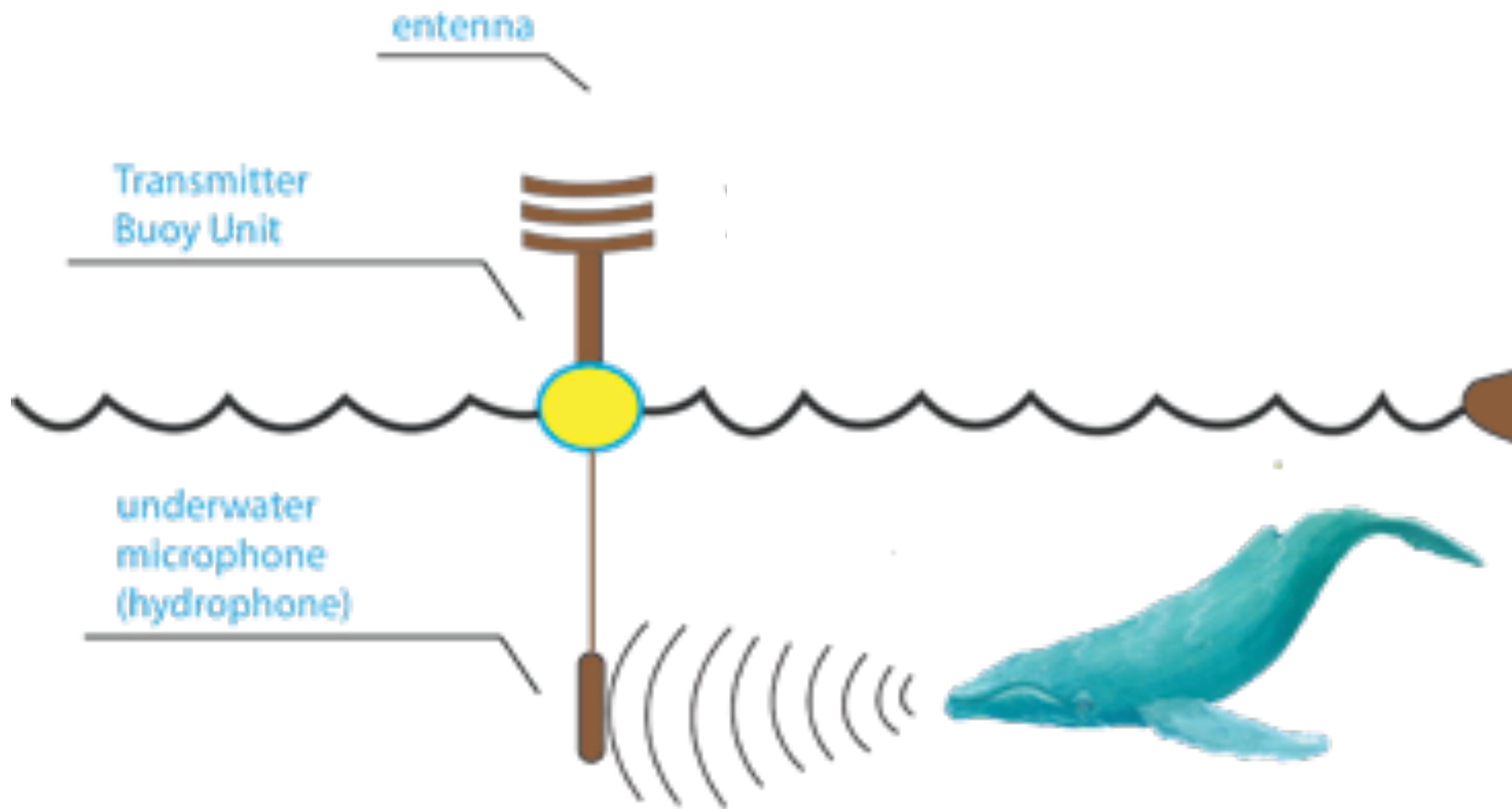


Anxiety caused by Underwater noise

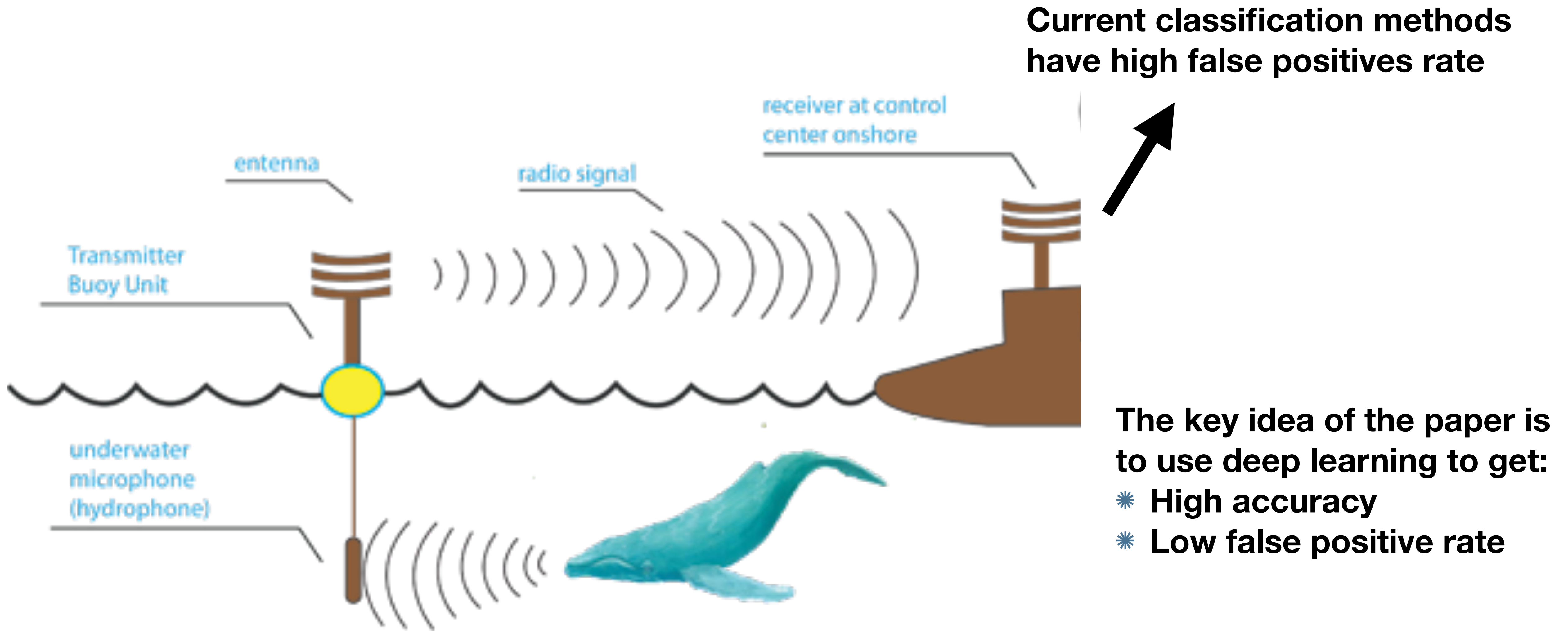
How can we passively detect marine mammal species?



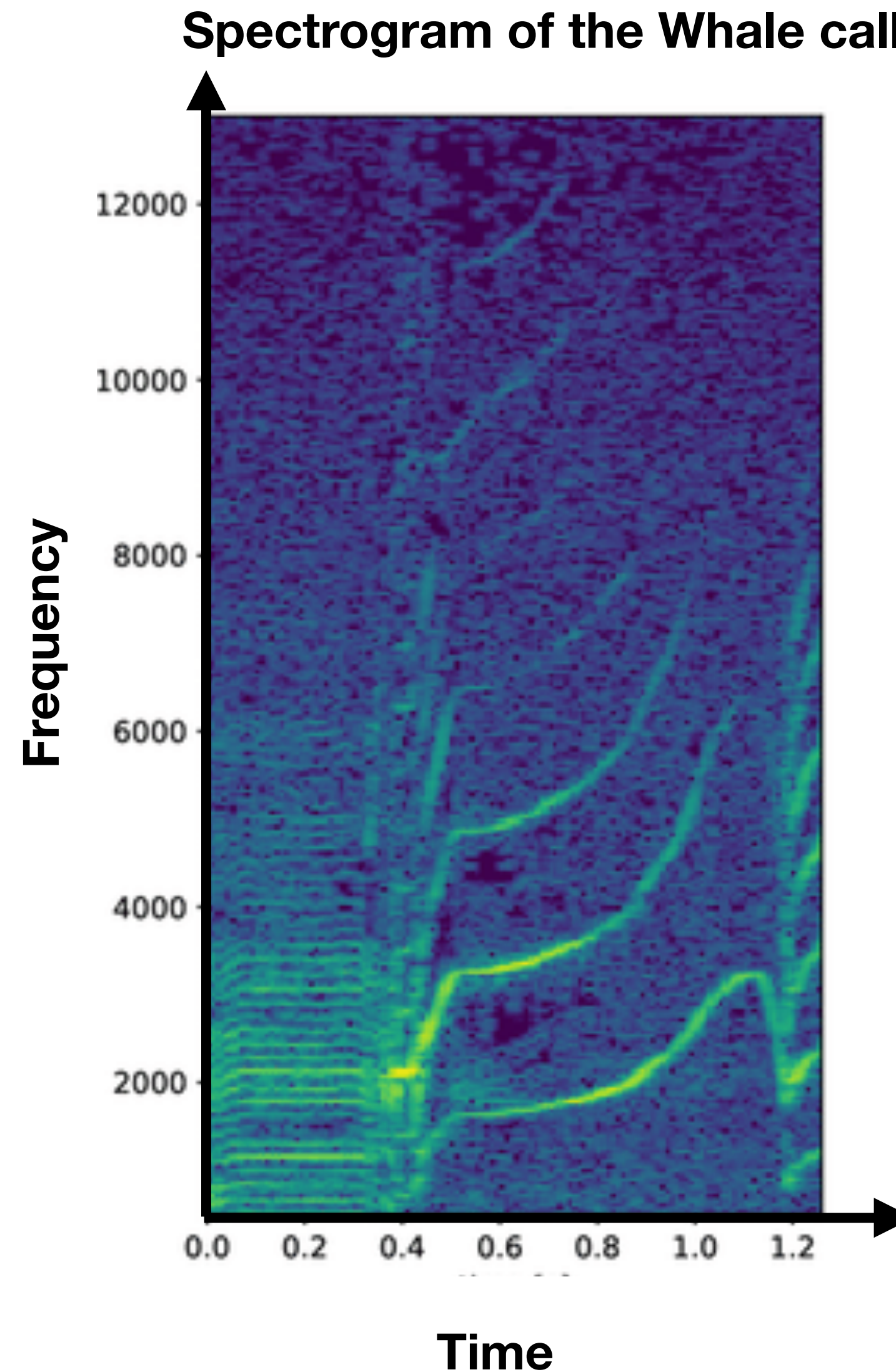
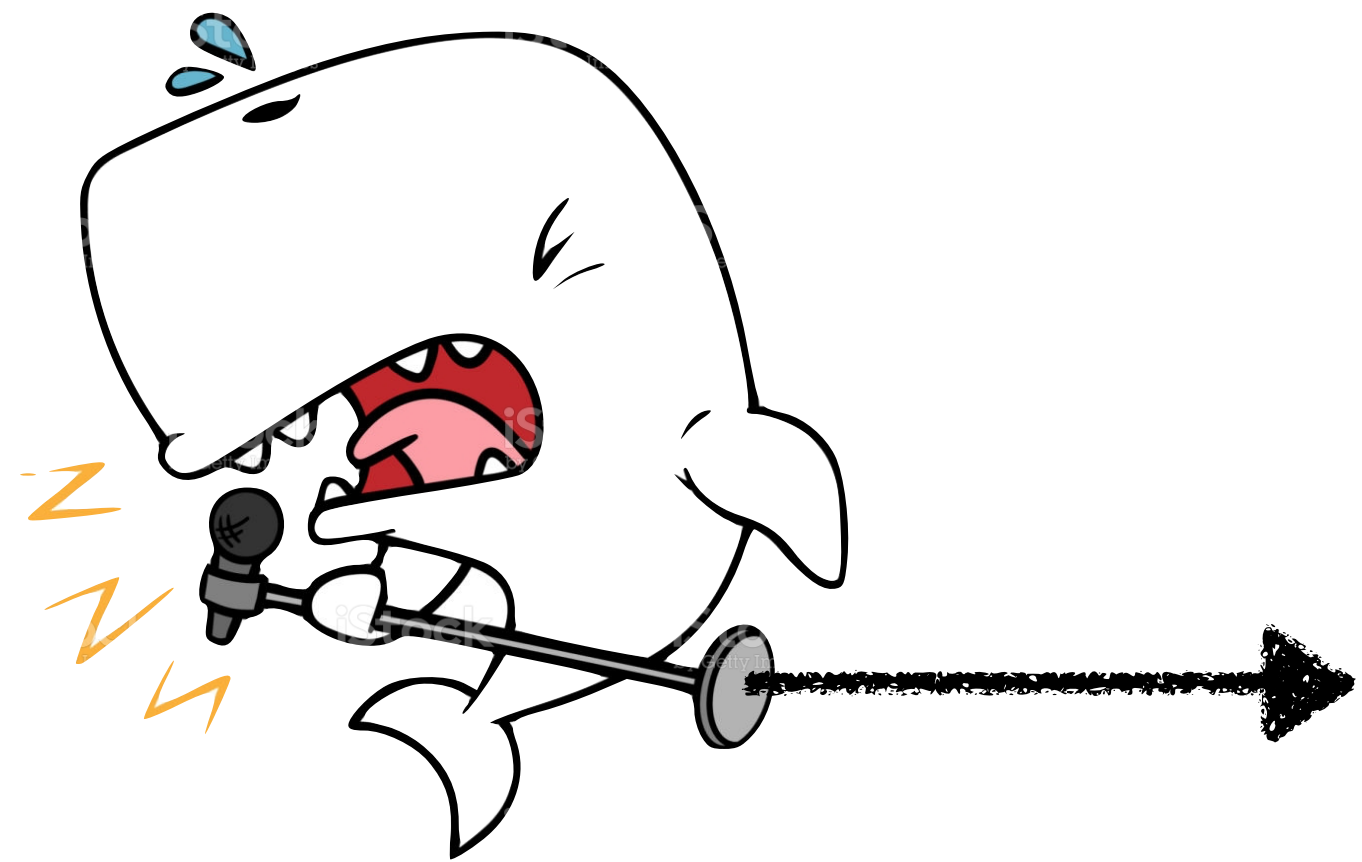
How can we passively detect marine mammal species?



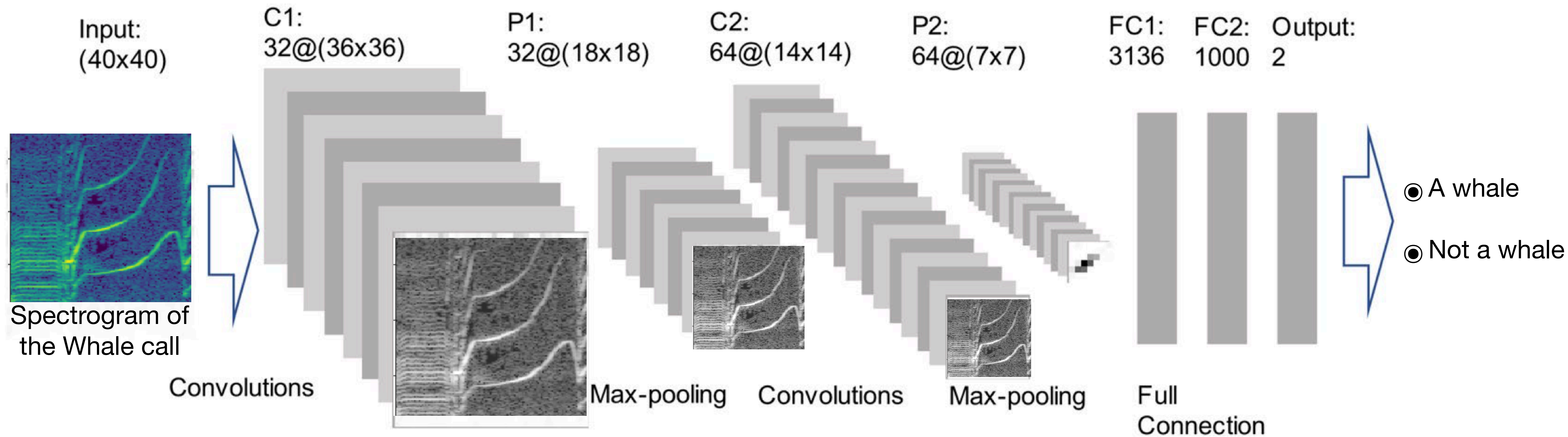
How can we passively detect marine mammal species?



What is the input to the Deep Neural Network?



Deep Network Architecture



How does deep learning accuracy and false positive rate compare to the previous methods?

