



# Automated Approaches to Bowhead Whale... Labeling?

aka... Whale Boxing!

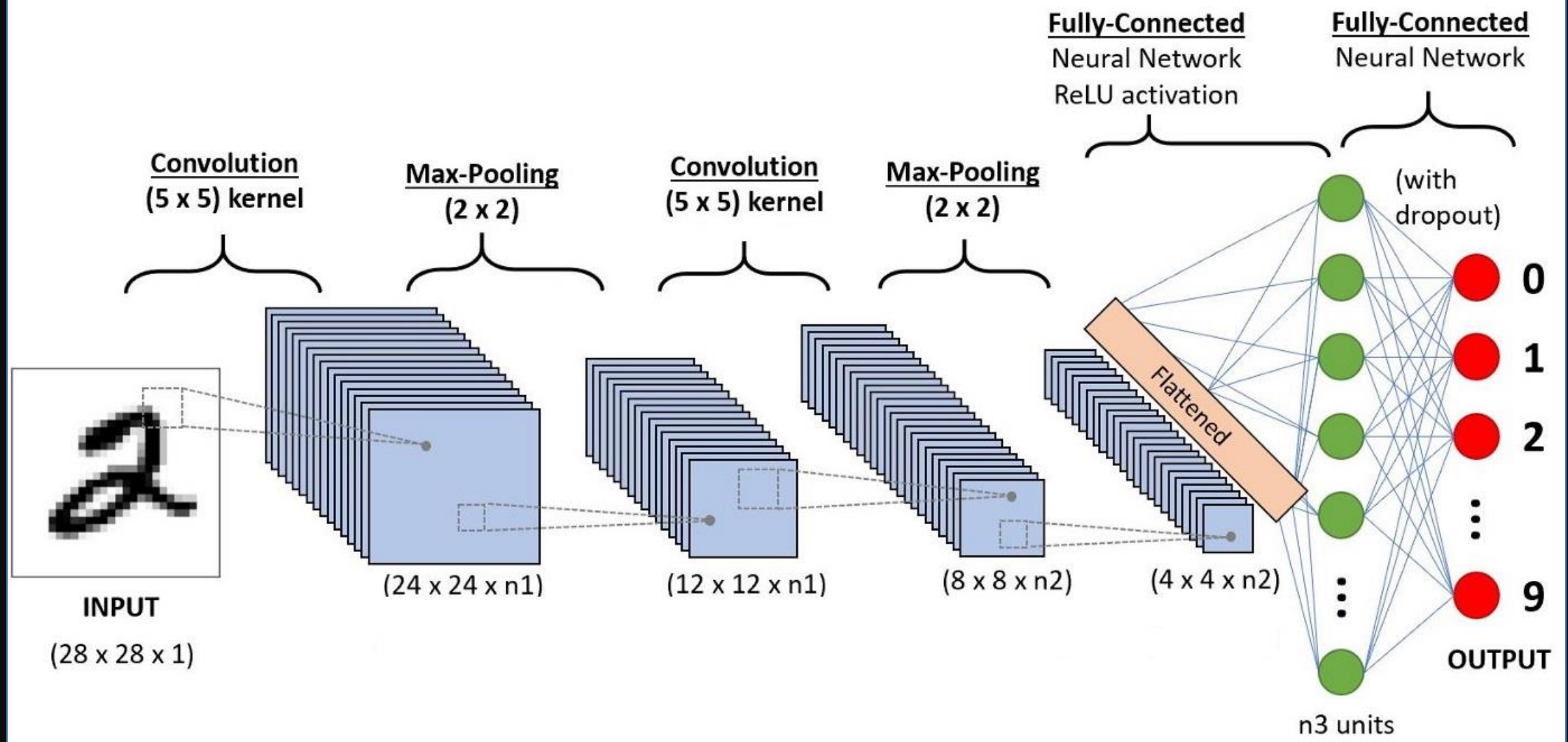
Advisors - Dr. Chris Tralie, Dr. Leslie New  
Student Researchers – Sam Gregory, Kacey La

●Left Tail

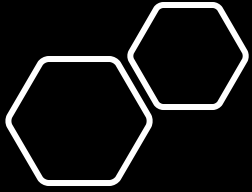
●Right Tail

●Head

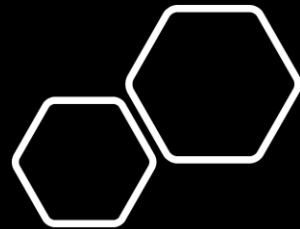
# Machine Learning and Motivations







# Comparing the Whales



## An aerial photograph of a whale breaching the ocean surface. The whale is oriented vertically, with its head at the top and its tail at the bottom. Three bounding boxes are overlaid on the image: a yellow box around the head, a dark red box around the midsection, and an orange box around the tail. A larger red box encompasses the entire whale. Small black circles mark the corners of these bounding boxes.

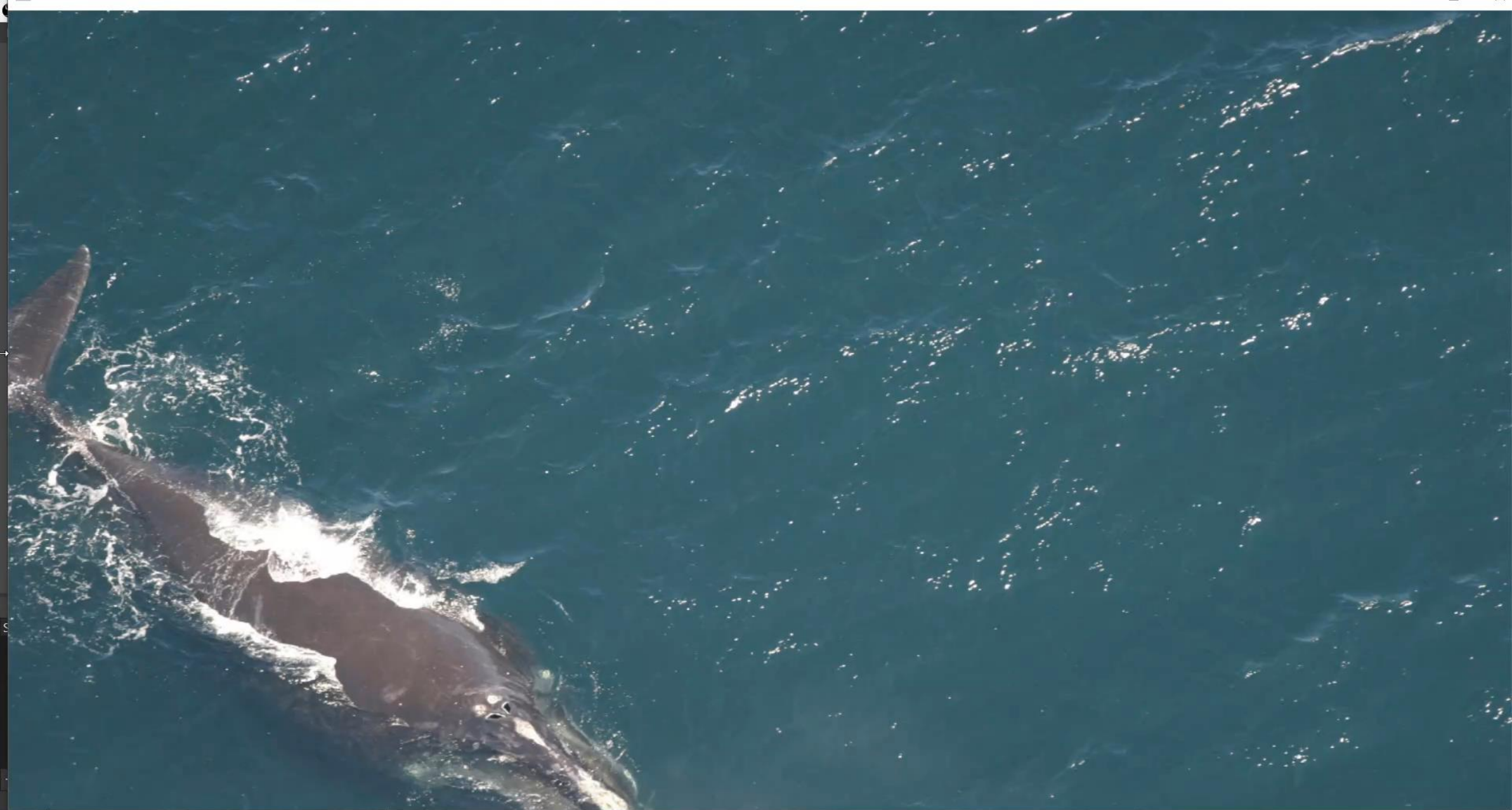
- Good bounding box identifier
  - Labels, so many labels
- Set up architecture for identification
- Simplify pipeline

**Megason.json**

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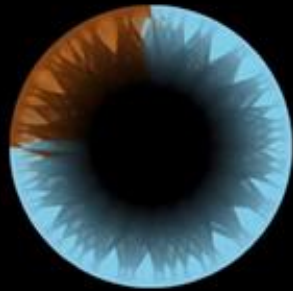
But in the meantime...





# Great Resources for Understanding Neural Networks

- But what is a neural network? | Chapter 1, Deep learning
  - 3Blue1Brown
- Deep Learning - Computerphile
  - Computerphile



3Blue1Brown



<computerphile>