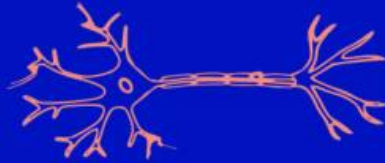


# LIMITATIONS

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Does the paper completely fill the gap you identified, or does it leave it incomplete? If it is incomplete, how so?



# Limitation 1: loss of information

Loss of information by using a scalar activity weight from high-dimensional voxel activity

- Information on the brain is more than just magnitudes of regional activations.
- By using a scalar weight, other meaningful information of the system that may be useful for biologically-informed ML is ignored.

Develop a system of low-dimensional activity weights to preserve more information (and reveal other dimensions important for tasks yet not implemented in ML algorithms).

## Limitation 2: finer discrimination

Limited on amount (N = 1260 images)

- Restricted to considering broad object categories

Would there be improvements in ML algorithms tasked to discriminate among objects less clearly distinguished in the visual cortex?

Given that people can distinguish fine-grained categories without dedicated visual processing regions, using brain activity from **all HL ROIs** is believed to yield similar improvements for classification tasks.

## **Limitation 3: optimal learning algorithm**

Is the learning algorithm used (SVM) the optimal choice in capturing information encoded in the internal representations of the brain?

An analysis of different algorithms (baseline vs. activity weighted performance)