

## SYDE552/BIOL487 Assignment: Visual Cortex Literature Review

Due Feb 25

25 marks

Conduct a literature review on neural responses in a **single visual or parietal area** of your choice in the **macaque monkey, excluding the retina, LGN, V1, MT, and IT**. Your report should explain how spike rates are related to features of the visual scene and to other signals if applicable.

Possible general topics of interest (non-exclusive):

- 1) Brief introduction to anatomy and connectivity of the area.
- 2) How spike rates vary as a function of various stimulus features.
- 3) How spike rates vary over time in response to a stimulus.
- 4) How responses vary across the population, e.g. statistics of some aspect of responses.
- 5) Topographic organization of responses.

The main text of the report should be 1500-2500 words excluding references and figure captions.

The report must cite 8 journal articles. It must include one figure copied and properly cited from each of four of these articles (total four figures). Each figure should illustrate an important property of neural responses in the area. Be selective and only include the most important figures. Be sure to explain the figure including what the axes mean, what it shows, and why it is important.

Submit your report in PDF form.